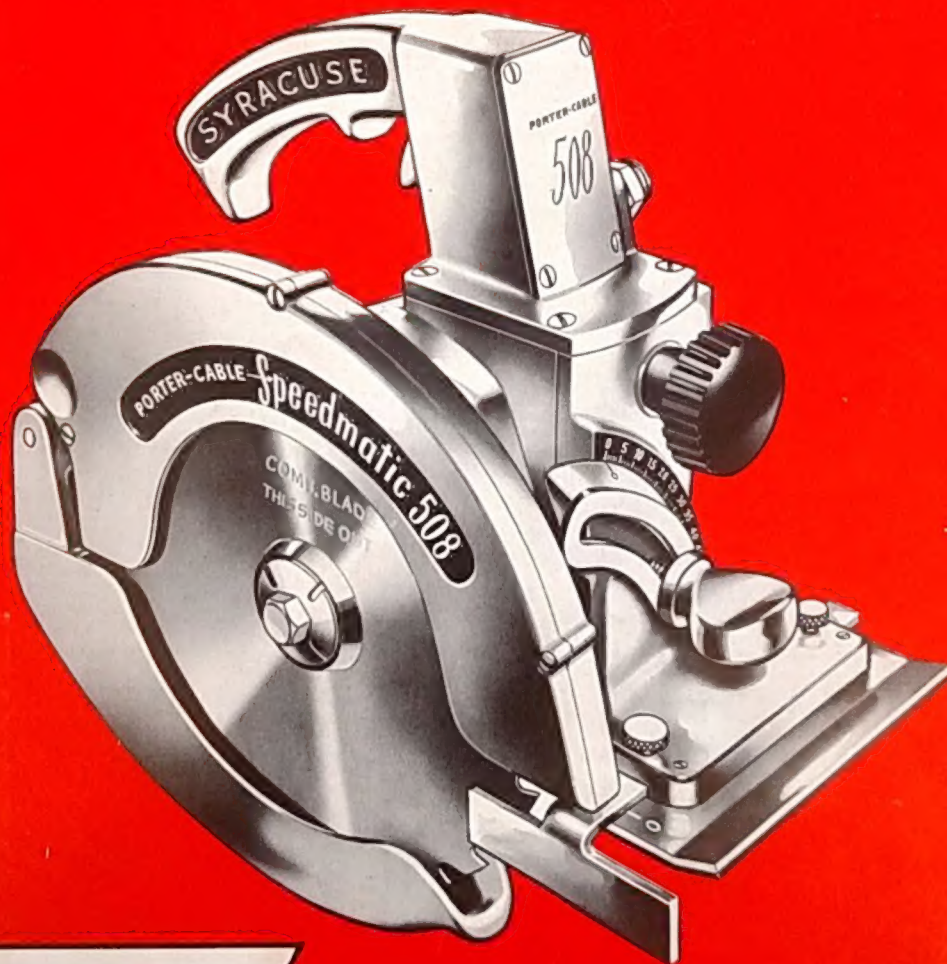


Operating and
Service Manual

SPEEDMATIC PORTABLE ELECTRIC SAWS



PORTER-CABLE
Speedmatic
TOOLS

PORTER-CABLE MACHINE COMPANY SYRACUSE 8, NEW YORK, U.S.A.



Your new Speedmatic Saw is one of the finest products that modern engineering, design, research and precision manufacturing can produce. It is built to give you maximum utility and long life. Give it the care you would any fine mechanical equipment and it will serve you faithfully.

Speedmatic Products are built to high standards of accuracy and quality that have made Porter-Cable famous for over forty years as producers of fine machines in professional trades all over the world.

Porter-Cable stands back of Speedmatic Products unconditionally, and maintains a policy that all of its products must give service as represented.

GUARANTEE

All Porter-Cable products are carefully inspected before shipment, and are guaranteed against defects in workmanship and materials. Each tool has a guarantee card packed with it, and this should be returned to Syracuse in order to complete the guarantee.

Under Porter-Cable's guarantee policy, the Company's obligation is limited to the replacement of any part or parts which have been examined by an authorized service depot and found to be defective. The complete unit should be returned to the authorized service depot, with transportation charges prepaid. The repair of any Porter-Cable machine by an unauthorized Service Depot automatically voids the guarantee.

A DISTINGUISHING FEATURE of every SPEEDMATIC SAW is its **BALANCE**

What does **SAW BALANCE** mean to you?

1. Greater **SAWING ACCURACY**
2. Greater **SAWING EASE**
3. Greater **SAWING SAFETY**

Here's **PROOF** of **SPEEDMATIC BALANCE**!

1. WATER-GLASS TEST



Stand the Speedmatic upside down on its handle. (No other saw will do this.) Place a full glass of water on the extra-broad shoe. Start the motor . . . and you'll be amazed! Not a drop of water spills. There's no starting twist or jerk. That's **TRUE BALANCE**!

2. LIFTING TEST



Ever lift a filled watering can? You quickly learned that using the side handle put a strain on your wrist . . . required effort to keep the can level . . . made it awkward to carry. So you shifted to the handle on top.

You found it easier to lift . . . easier to carry . . . easier to control. Why? Because the weight was balanced!

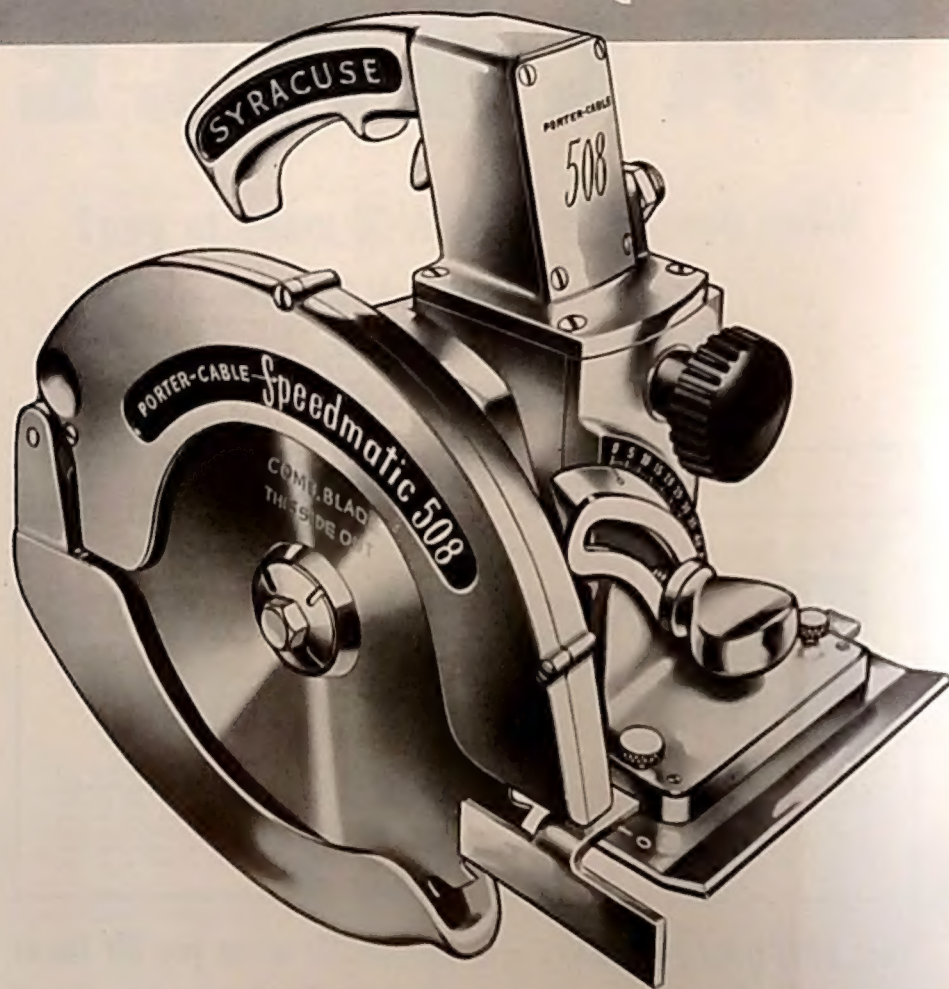
3. STRING TEST



Suspend the Speedmatic at the end of a string. You'll see that the weight is evenly distributed and balanced. Now start the saw. Note that it is dynamically balanced. The saw stays in a horizontal, center-poised position. Does not twist, tip, or veer.

**Yes, SPEEDMATIC SAWS are: BALANCED when you lift them!
BALANCED when you hold them! BALANCED when you use them!**

WORLD'S *First* KICK-PROOF SAW



Your new Model 507 or 508 Speedmatic Saw cannot kick back. The reason: a unique kick-proof clutch allows the motor to turn, even though the blade remains stationary.

NO LOSS OF CONTROL!

NO OVERSTRESS ON GEARS!

NO MOTOR BURN-OUT!

NO DAMAGE TO WORK!

OTHER SPEEDMATIC SAW FEATURES

- | | |
|--|--|
| 1 POWERFUL MOTOR
— delivers high speed — particularly necessary when cutting extra-hard materials. | 5 HELICAL GEARS
— eliminate dangerous starting torque and twist. |
| 2 NEVER-FAIL SWING GUARD
— can't be jammed by wet sawdust. | 6 BROAD BASE
— keeps saw steady while cutting. |
| 3 RIGHT SIDE BLADE
— saw rests firmly on main piece. | 7 INSTANT DEPTH ADJUSTMENT
— quick, easy, accurate. |
| 4 BALANCED
— one-hand operation. Other hand holds work. | 8 LIGHT WEIGHT
— reduces fatigue. |

FEATURES OF YOUR SPEEDMATIC SAW



The SPEEDMATIC Saw is specifically designed for efficient one-hand operation. The handle is on top of the saw with the weight evenly distributed and perfectly balanced below it. The blade is on the right where you can see the cut and follow the line at all times. Easy, accurate one-hand operation leaves the

other hand free to hold the material or to support the operator on scaffolding, roofs, ladders, etc.

BROAD BASE - made of spring tempered aluminum alloy. It is fully rust-proof and will always remain clean, sliding easily on the work. Note that the right edge of the base is bevelled. This bevelled edge is easily visible in a normal sawing position and is of sufficient length for accurate parallel register on the cutting line.

The SPEEDMATIC Saw is constructed with a larger base, not only to make more certain that perfect square cuts will be made, but also to take all unnecessary strain off the operator's hand and wrist. This is particularly advantageous when cutting bevels, for the larger base keeps the saw rigidly aligned without any extra strain on the operator. The larger base is also good insurance against breakage for with it the SPEEDMATIC can be put down almost anywhere. It will not roll off the scaffold, it does not turn over, and the larger base gives all-around protection to the mechanical parts. You can speedup your work because your SPEEDMATIC requires less attention on the job.



HIGH-SPEED, HELICAL CUT GEARS - Provide a high blade speed and maximum cutting efficiency. This helical gear drive delivers 11% more power to the blade than conventional gears. The drive is in line with the blade, eliminating all dangerous torque twist. You can hold the SPEEDMATIC with one finger and it will not waver under starting load. Note how the high speed of the blade practically feeds the SPEEDMATIC through a cut.

SWING GUARD - This is a positive safety feature. Even wet, gummy sawdust will not clog the action of the guard nor prevent its springing back to cover the blade.

ANGLE ADJUSTMENT - Easy, rapid setting. At any angle the bevelled edge of the base and the line of cut are fully visible in a natural sawing position. The angle segment is a sturdy, precision-machined part; you can depend on its accuracy.

GENERAL OPERATING INSTRUCTIONS

STANDARD EQUIPMENT - Metal carrying case, 1 combination blade, rip gauge, 1 set of arbor wrenches, tube of grease, 10-foot 3-wire rubber covered cord and plug. One double end retaining wrench included with Models 507 or 508 instead of arbor wrenches.



GROUNDING - Your SPEEDMATIC Saw is equipped with a 3-wire cord. The third, or green wire, is a ground wire, one end of which is connected to the saw frame. The battery clip on the other end should be attached to any convenient ground, such as a water or electric conduit pipe or rod driven into the ground. This will prevent any electric shock to the operator in the event that a short circuit should develop in the saw or in the power system on which it is used. Each saw, before shipment, is ground tested on 1000 volts, which shows up any weak insulation or ground. However, if

a ground should develop; (1) clean saw and all air passages, (2) check wiring for bare wires or loose connections, and (3) if the ground is not located, send the machine to your nearest Porter-Cable Factory Service Branch or Authorized Service Station for inspection. (See list on page 36).

POWER SUPPLY - Your SPEEDMATIC Saw will operate on an AC-DC, 25 to 60 cycle circuit of the same voltage as that stamped on the nameplate of the machine. Connect cord to floor outlet or extension direct to switch box. **DO NOT CONNECT CORD TO FIXTURE SOCKETS** because these are generally wired with No. 18 wire which is too small to carry the current drawn by the saw without overheating and eventual breakdown of the insulation. If it is necessary to use an extension cord, we recommend that the wire size be not less than No. 14 for 50 ft., and No. 12 for 100 ft. The use of wires smaller than the above sizes will reduce the cutting power of the saw. If the available power source should be other than a single phase system and/or the voltage differs from that on the nameplate of the saw, changes can be made in line connections. If in doubt as to the current available, or if changes in the current are known to be necessary, contact your local power company or a qualified electrician.

CUTTING is easier with a SPEEDMATIC than with any other portable saw. Be sure the work is well supported and held, then place the tip of the large base on the piece. Pull the trigger switch and allow the saw blade to reach full speed before starting the cut. Follow your pencil mark with the bevelled edge of the base. To avoid binding or jamming of the saw blade when cross-cutting near the center of the piece, pull back on the board to keep the cut open. When the cut is finished, release the trigger and set the saw down. The positive-action tension spring assures the swing guard returning to cover the blade. This permits setting the saw down immediately without waiting for the blade to stop.

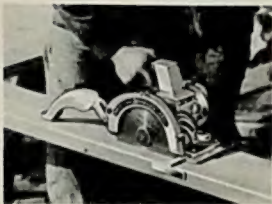


Squaring off ends of planking. Cross-cut Gauge eliminates need to pencil mark each piece.

CROSS-CUTTING with the SPEEDMATIC cross-cut guide assures a straight, square cut. It proves invaluable for such operations as cutting studding to length. A flush fit with top and bottom plates can be depended upon. Use it to cut shelving, cabinet stock, and for accurate dadoing. Obtain this handy accessory from your local Porter-Cable dealer and keep it in your saw carrying case for use whenever the job calls for accurate cross-cutting.

Type
Model
Date
Name
City

What



Making a long rip cut, using the rip guide. The saw runs along smoothly, giving a straight, even cut.



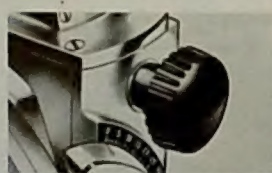
This carpenter has adjusted his depth so that blade both cuts top piece and marks bottom piece for the next cut.



Builder shown here has ingeniously adapted a Speedmatic to cut an extreme angle. By attaching base to beveled piece of lumber, he increased angle of cut almost 15°.



Durable, attractive carrying case protects your saw when not in use.



A close-up of easy-to-use depth adjustment knob. Non-slip edge provides sure grip.

FOR RIPPING use the adjustable rip guide which is standard equipment with your SPEEDMATIC Saw. Set the guide to desired width. Guide the saw, keeping gauge fairly tight against the edge of the board. This will give you a straight, fast cut and will avoid cramping of the saw blade.

When cross-cutting or ripping very wide sheets such as plywood or masonite, a strip may be tacked down for the edge of the saw base to guide against.

LUBRICATION - Use Porter-Cable Special Grease, Part Number 26-YX. Fill grease cup in gear housing once a week if saw is in continuous use. Remove pipe plug and grease the bearing on commutator end of armature once a month. This lubricates all the ball bearings and gears. Too much grease will make bearings run hot and will force grease through bearing seals onto the commutator. A drop of oil should occasionally be added to the depth slide and screw, and to the swing guard hinge pin.

CLEANING OR REPAIRING - Motor compartment should be blown out with compressed air once a week, or daily if machine is used under extremely dusty conditions. While the design and assembly of the SPEEDMATIC Saw are very simple, should any extensive repairs be necessary we recommend that the machine be sent to your nearest Porter-Cable Authorized Service Station. (List on page 36).

GENERAL DIRECTIONS - Keep this saw clean and all passages free from dust. Do not place in snow or where fan may draw in foreign substances. Keep it in the carrying case when not in use. Give this quality equipment the care it deserves and it will serve you through the years with maximum efficiency.

Operating Instructions for Models 507 & 508

TO ADJUST FOR DEPTH OF CUT - Loosen large knob on depth adjusting slide and raise or lower slide until blade is exposed the desired distance below the base plate. It is better to adjust the depth of cut so the blade just cuts through the work. This depth adjustment grips positively and holds its position accurately. Adjustment is easy and quick.



Closeup of angle adjustment. Angle segment is accurately calibrated from 0° to 45°.

the proper tension is obtained. If tightened too much, it will make the guard stiff and sawing awkward.

As the rubber bumper on the swing guard wears, the guard may strike the gear housing. To keep the guard from striking the gear housing, it may be adjusted by inserting the Allen wrench through the opening directly in back of the bumper and turning the screw clockwise until the bumper holds the guard well away from the gear housing. Keep the swing guard on your saw and prevent accidents.

TO CHANGE SAW BLADES - Press the saw blade teeth against a piece of wood and loosen the Saw Retaining Screw Assembly by turning to the left (counter-clockwise) with the box-type wrench furnished with the machine. Remove screw and lift off the saw blade retaining washer and saw blade.

When replacing the saw blade, clean outer side of saw retaining washer and jackshaft flange. Before installing the blade, apply a light film of bearing grease to the face of the flange on the jackshaft and to the side of the bronze retaining washer that contacts the blade. Next fit the blade over the jackshaft arbor, making sure points of teeth face upward at the front of the machine. Replace the saw blade retaining washer, insert the saw blade retaining screw assembly in the jackshaft and tighten with wrench.

The Kick-Proof Clutch works best with the Saw Retaining Screw Spring tension adjusted to "belly-out." When thicker than average blades are used, it is possible to tighten the saw retaining screw to the point where the spring is flattened. To prevent this, use one of the enclosed washers, placed upon the saw retaining screw. The size of the washer selected will be dependent upon the thickness of the blade or abrasive disc to be used.

Operating Instructions for Models BK-10 & BK-12

TO ADJUST FOR DEPTH - Place saw on its side and turn thumb screw adjustment until the blade is exposed for desired distance below base plate. This adjustment is self-locking and is very easy to secure exact depth. This is an exclusive feature of the Speedmatic Saw.

TO ADJUST FOR BEVELS - Loosen slightly large knob on front of motor; then swing body of saw until the desired angle is obtained and lock it by tightening the knob. The angle is graduated at least every five degrees. This graduation always allows rapid setting and duplicating of angles.

TO ADJUST SWING GUARD - The Swing Guard protects the blade at every angle and should have just enough spring tension to hold it up in position. If tension is not sufficient it can be tightened by loosening the knurled hinge pin and turning it until the proper tension is obtained. If tightened too much it will make the guard stiff and sawing awkward.

TO CHANGE SAW BLADES - First remove three screws in upper guard, pull back swing guard and let saw teeth dig into wood, then with wrench furnished give nut a quick turn. When replacing saw blade, clean saw retaining washer and jackshaft flange. For removing abrasive blade use Hexagon or square wrench furnished to hold jackshaft from turning when loosening nut.

SAW BLADES



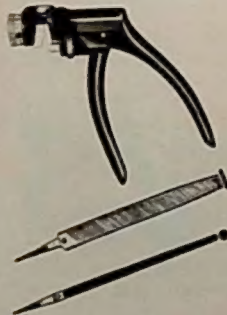
CARE OF BLADES - The best results in fast, accurate cutting are obtained when sharp saw blades are used. Sharpen blades as frequently as necessary. You will save time, and your SPEEDMATIC Saw motor will stand up indefinitely, when your blades are properly filed, set, and cutting freely. Have sharp blades handy. As soon as you suspect that a blade is dull or has lost its set, replace it.

The Porter-Cable Machine Company has made an exhaustive study of saw blades to determine the most efficient types and tooth angles for cross-cutting, ripping, etc. We have learned by long experience with blades used in all kinds of wood and under varying conditions, how best to sharpen blades.

With this in mind, it would be wise to trace on paper the outline of a blade before using it so that you may have a pattern to follow in resharpening. The teeth in some types of blades are set over alternately to provide clearance for the blades. Others are hollow ground, wide at the edge of the teeth and narrow near the center of the blade. Too little set tends to cause a blade to bind, to heat up, taking the temper out of the blade, and to throw an excessive load on the motor. Too much set requires more power and lessens the rigidity of the teeth.

When filing saw blades, file face bevel and clearance angle the same as that furnished on the new blade. For general use on the SPEEDMATIC, set teeth .015" to .018".

When a saw blade becomes dull, bright spots show up at the tip of the teeth. The secret of accurate and concentric sharpening is to file the teeth along the top faces, maintaining the bevel (14° to 17°), just until those bright spots disappear--no more. Then, with a file, take a light finishing stroke from the gullet towards the tip of the tooth on the front face of each tooth to remove any burrs.



A blade should be perfectly round. To check this and to round the blade, if necessary, set the SPEEDMATIC upside down and rest a piece of wood on the base just touching the teeth. If all teeth do not touch the wood as the blade is rotated, start the motor and hold a rigidly supported abrasive stone against the blade until all teeth touch the stone. **DO THIS BEFORE SHARPENING.**

Your Porter-Cable Authorized Service Station, or Factory Service Branch, can supply you with a wide variety of saw blades, each designed for a specific application. See your SPEEDMATIC catalog for complete listings.

COMBINATION BLADE

Standard blade for cross-cutting and occasional ripping of all kinds of lumber. Also recommended for celotex type sheathing.



RIP BLADE

General ripping on all types of lumber free from nails.



PLANER BLADE

Hollow ground from the teeth back to the blade center. Recommended when a smooth end grain is desired (interior and exterior trim, doors, cabinets, etc.). Not recommended for general duty cutting such as framing.



BLADE FOR MASONITE, PLYWOOD, AND LIGHT NON-FERROUS METALS

A fine-tooth blade that produces a clean-edged cut on masonite and plywood. Recommended for light gauge aluminum, brass, copper; aluminum siding, copper flashing. For heavier gauge material and ferrous metals see abrasive wheels below.



ALL PURPOSE BLADE

Specially designed for applications where the standard wood blade would dull quickly. Can be used for either cross-cutting or ripping. Teeth are hardened



by special heat treating process to retain true, sharp cutting edge under extremely difficult sawing conditions. Especially adaptable where occasional nails or abrasive materials are encountered. For removing old floors, cutting wallboard, etc. These blades must be ground to sharpen. They cannot be filed.

DADO CUTTERS



For dadoing, rabbeting, channeling, etc. Used in corner bracing, drawer and shelf construction, stair stringing, etc. Arrange teeth of chippers to correspond with gullets in flanges. Your SPEED-

MATIC Models BK-10 and BK-12 can be purchased with a longer jackshaft at slight additional cost to permit the use of dado cutters in greater widths. Models 507 and 508 are not equipped to do dadoing operations.

STEEL INSERTED-TOOTH BLADE



For cutting old flooring and lumber where several nails may be encountered. When ordering additional teeth or

holders be sure to specify style and part number of the old part.

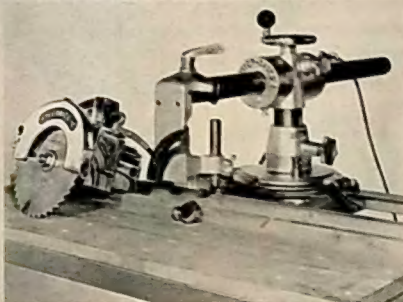
ABRASIVE CUTTING WHEELS



For cutting structural metals, single sheet transite, magnesite, terrazzo, mortar, and softer varieties of field

stone and marble facing blocks. Score tile, brick, flagstone, and concrete. Your SPEEDMATIC dealer stocks abrasive wheels that are supplied by several good abrasive manufacturers. They are qualified to advise you on the proper type of abrasive wheel for your particular job. When using abrasive wheels on a portable saw, be sure the saw sets flat on its base. Move the saw in a straight line. The work must be so held as to prevent movement or vibration. Do not force the saw - let the blade do the cutting.

RADIAL ARM AND SAW TABLE FOR SPEEDMATIC SAWS



RADIAL ARM (Model ERA) - Combined with the SPEEDMATIC Saw, this unit gives you all the advantages of both a portable electric hand saw and a radial saw at a considerable saving. Sturdily built and anchored to a metal stand on which a hardwood table is supported, this rig combines the features of a parallel swing, miter, and rip saw. A special adapter for each SPEEDMATIC Saw is included as standard equipment with the Radial Arm.

Models 507 and 508 may be used with the ERA Radial Arm by making other adaptations. Parts and information may be secured through your nearest dealer.

GENERAL INSTRUCTIONS FOR PORTER-CABLE TYPE ERA RADIAL ARM - Because the wood table on the radial arm frame is subject to slight changes due to shrinkage and general aging of the wood, plus the fact that the radial arm may have been roughly handled in shipment or in operation, there are five major adjustments which may occasionally be necessary.

Before making any of the following adjustments, thoroughly inspect the frame and wood table, tightening all screws and fastenings. Be sure to tighten the four nuts on the underside of the center support by which the radial arm base is fastened to the frame.

It is of the utmost importance that these adjustments be made in the following sequence. For any adjustments to be effective, it is extremely important that the frame be as rigid as possible and the **LEGS MUST BE SET ON AN EVEN FOOTING.**

The five general adjustments are as follows:

- A. Adjustment of roller tension on the travel arm.
- B. Locate zero line on saw or adapter with a small chisel.
- C. Leveling the arm with the table top.
- D. Squaring the line of motion or travel of the arm and saw blade with the fence.
- E. Squaring the cut of the blade with the table top.

A. ADJUSTING ROLLER TENSION ON TRAVEL ARM

1. Adjustment of the roller tension on the travel arm is easily accomplished. Adjustment is nec-

essary only when the arm has become loose in the barrel through shipment, rough handling, or from rotating the arm in the barrel while making the adjustment described under section "E".

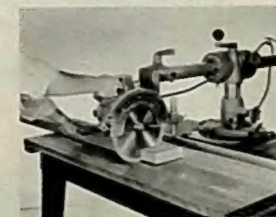
2. The Porter-Cable Radial Arm, Model ERA, has a hexagon cap screw directly under the travel arm on both the front and the rear end covers. Also, there is a small hex headed set screw with a hexagon locking nut on the under side of the barrel both at the front and rear ends. To adjust the roller tension, loosen the cap screw on the front and rear end covers about a half turn, then loosen the lock nut on the hex head set screws and tighten these set screws. This should take all the play out of the arm provided this adjustment is made at both the front and rear end of the barrel. Finally clamp the set screws with the lock nuts and then tighten the hexagon cap screws on each end cover of the barrel.
3. Note: The tightness of the nuts which hold the end covers to the barrel has an inverse effect on the tension of the rollers on the bar. Increasing the tightness of these nuts will decrease the tension and backing off or slightly loosening these same nuts will increase roller tension. In many cases, this fact may be used to advantage in the adjustment of roller tension.

B. LOCATING ZERO LINE

1. When the saw has been attached to the adapter, locate the ZERO line on either the saw or the adapter as needed, with a small chisel.

C. LEVELING THE ARM

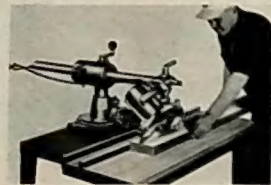
1. The next adjustment should be that of leveling the arm with the table top. The idea is to level the arm with the table top so that the **SAW BLADE WILL CUT THE SAME DEPTH** anywhere on the table, forward and back on the straight cut-off or at 45° to the right or left, or at any angle of the arm between.
2. First, remove the forward fence, which may get in the way, by knocking out the wedges. Remove the base from the SPEEDMATIC SAW by taking off the angle adjustment knob, clamp the machine, with the saw blade in place, to the radial arm adapter bracket with ZERO mark on the SPEEDMATIC in line with that on the adapter quadrant. Make sure, of course, that you have the right bracket for the saw you intend to use (96-K75 Adapter for K-75, K-88C, K-89; 96-K88 Adapter for K-88, K-88A; 94-K10 Adapter for K-10, BK-10; 96-K12 Adapter for K-12, BK-12).
3. Loosen the knob on the side of the barrel so the arm will travel freely. Set the SPEEDMATIC Saw at its own maximum depth and the arm at straight cut off. Loosen the locking knob on the side of the base column and elevate or lower the arm by turning the crank until the saw blade is just high enough to clear the rear fence and **LOCK** the elevation of the column by retightening the knob.
4. After making sure that both the elevating lock knob and the swivel locking lever on the base are tight, work the arm back and forth. If you have already loosened the



Making a straight, square cut on the radial arm.

knob on the side of the barrel as previously mentioned, the arm should travel freely. However, if the arm is the least bit loose or "sloppy" within the barrel, it will be necessary to adjust the tension of the rollers as described under Section "A" before attempting this or any other adjustment.

- Assuming that the arm works freely without any play within the barrel, we can proceed. Take a 4" length of 2 x 4 and lay it flat on the table against the rear fence in line with the saw blade. Now elevate the saw blade by the depth adjusting screw on the SPEEDMATIC Saw until the saw blade just clears the 2 x 4 block, or in other words, until the saw blade clears the table by the thickness of the block. Using the thickness of the block as a gauge, check the clearance of the saw blade over the table top from the fence to the outer edge farthest away from the fence. Likewise, check the clearance at the fence with the arm swiveled 45° to the left and LOCKED, and swiveled 45° to the right and LOCKED. If there is more than 1/32" difference between the forward and back position and more than 1/16" difference between the right and left position, it may be advisable (depending on the accuracy required in the work) to tilt the radial arm slightly at the column base where it is bolted to the metal frame.



Making a miter rip cut — a tough job made easy on the radial arm.

- There are four bolts by which the Radial Arm base is fastened to the frame. The Radial Arm may be tilted by first loosening these four bolts and then adjusting the Allen set screws in the cast iron base.

For example, let us suppose that with the arm set at the 90° straight cut-off position with the swivel locking lever tight and with the machine against the bumper at the fence, we can just get the block between the saw blade and the table top. Then, let us assume that when we pull the machine toward us to the edge of the table, we try to insert the block between the table and the saw blade, but we find that the saw blade is about 1/16" or so closer to the table than it was at the fence.

To correct this, it is first necessary to loosen all four bolts where the Radial Arm base is attached to the frame. Now screw down on the Allen set screws at the front of the base to raise the saw enough to just clear the test block and then tighten all four bolts together evenly.



Compound miter cuts are simple and true when made on the radial arm.

If the set screws have been adjusted properly, you will find that by rechecking, the block will show that there is approximately 1/32" clearance between the block and the saw blade both at the fence and at the table edge. What has happened is that the set screws raised the position of the arm roughly 1/32" at the fence and 3/32" at the table edge, thereby leveling the arm with the table top for the straight cut-off position, forward and back.

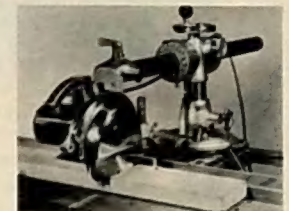
Now that the arm is level with the table top forward and back, it is necessary to check the arm from left to right or right to left to make the proper adjustment, if any is needed. Without changing the elevation of the saw blade, loosen the swivel locking lever on the column base, pull up on the index pin and swing the arm to your left to 45° and LOCK the arm by re-tighten-

ing the swivel locking lever. Now check with the block the height of the saw blade above the table top between the edge of the table and the fence.

Now, repeat exactly what you have done, but with the arm swiveled to the RIGHT.

Let us suppose that with the arm to the LEFT, the block can not be inserted between the blade and the table and that the saw blade comes a good eighth of an inch below the top surface of the block. Likewise, we assume that with the arm to the RIGHT, the saw blade clears the block by 1/8" to 3/16". From this, we see that the arm to the LEFT at 45° is a good quarter inch closer to the table than when to the RIGHT at 45°. In other words, for the same setting of elevation, the saw blade would cut 1/4" deeper to the left 45° than to the right 45°.

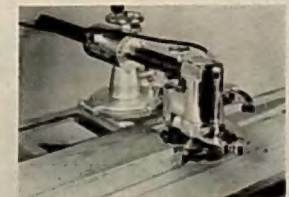
To correct this, we again loosen the four bolts holding the base to the frame and screw in the Allen set screws on the side that cuts the deepest or in this case, the left side. Then tighten all four retaining bolts evenly. Finally, check the height of the saw blade above the table with the arm to the right and then to the left. If necessary repeat the adjusting operation until the saw blade is approximately the same height above the top of the table for any position forward, back, to the right and to the left.



Equipped with dado cutters, the radial arm is tops for making grooves for shelving, etc.

D. SQUARING THE LINE OF MOTION OR TRAVEL OF ARM

- Now that the arm is level with the table top so that the blade cuts the same depth anywhere on the table surface, we can proceed to the next check adjustment -- that of squaring the line of motion or travel of the arm and saw blade with the fence.
- Please note that we say "squaring the line of travel of the blade" and not merely "squaring the blade with the fence." Aligning the blade parallel with its line of motion will automatically square the blade with the fence. First, be sure the arm is set at ZERO in accordance with the calibration at the base of the barrel. Now to see if the arm travel is square with the fence, we suggest that a pencil or spike of sufficient length, be clamped on the saw arbor in place of the saw blade allowing the pointed end to touch the table at the fence. Take a square that you know is accurate and lay it flat on the table with the short side of the square up against the fence. Then move the square in this position along the fence until it nearly touches the pointer. Hold the square still and pull the machine away from the fence watching the pointer to see if it moves parallel with the long edge of the square.
- If the pointer does not follow the edge of the square, loosen the four bolts which fasten the radial arm base to the frame and swing the whole assembly slightly until the pointer attached to the saw arbor follows parallel with the edge of the square. Tighten the bolts and re-check. In rare cases, it may be necessary to slightly enlarge the bolt holes in the center support of the frame,



Notching the end of a board with dado cutters to make a firm, even fit with another piece.

but ordinarily there is enough clearance in these holes for this adjustment. Having the line of travel of the arm square with the fence at the straight cut-off, automatically corrects the 45° cut-off, both to the right and to the left.

4. However, if the straight edge is more than 1/16 of an inch from the mark it will be necessary to adjust the swivel head.

Swivel Saw Head: Be sure the saw is set at ZERO. (Release swivel head lever and loosen nut directly under it.) Insert hex wrench (sent with arm) through the two holes in top of head and loosen screws. Then turn saw until it is square with the fence. **DO NOT DISTURB INDEX PIN AS THIS LOCATES THE SWIVEL HEAD.** Then tighten the two screws with hex wrench and also the lower nut under arm. Lock head to arm by tightening lever. This adjustment is necessary only when using another model of SPEEDMATIC Saw when a new adapter is used.



A semi-permanent radial arm set-up, with an extended table and a box cover for the arm.

Swivel Head Clamp Lever: The bottom surface of lever will wear in time and change position of clamping. To re-set lever to convenience of operator, loosen lever and bottom nut on travel arm and turn stud until lever locks head at right angles on right hand side of bar.

Clamping Ring: Should the lever fail to lock the bracket to base, tighten bolt on opposite side until the lever firmly locks the rings against both members.

E. SQUARING THE CUT OF THE BLADE

1. The next adjustment is that of squaring the cut with the table top. If we make the center-line of rotation of the saw blade and jackshaft parallel with the surface of the table, we automatically square the cut with the table since the saw blade rotates in a plane perpendicular to this center-line.
2. First make sure, as first mentioned under Section "B", that the ZERO marks on the SPEEDMATIC and the radial arm adapter quadrant are in line.
3. Remove the stationary guard which carries the name SPEEDMATIC and take off the saw blade. Place the saw blade retaining washer on the arbor, then the saw blade and finally the nut next to the saw blade — do not make the nut too tight. The object of all this is to space the saw blade outside of the guard, so that a square may be used directly on the blade.



The Radial Arm converts to an overhead router with the use of special adapters.

Because the two sides of the saw blade retaining washer may not be exactly parallel, the saw blades may wobble somewhat when rotated. If this is the case, mark the high spot of the wobble and by rotating the arbor shaft, bring the center of this high spot on the blade to the same height above the table as the center of the blade itself, so that an imaginary line from this high spot drawn thru the center of the blade will be horizontal and parallel with the table top. With the blade in this position, check it with the square relative to the surface of the table.

4. If the blade is not square with the table, it will be necessary to ROTATE the travel arm itself within the barrel. This is accomplished by loosening the nuts on the two thru rods which hold the end covers on the barrel. Take a hammer and with a block of wood held on one of the nuts, rotate these end covers in the correct direction by tapping first on the front cover, then on the rear cover.

5. **CAUTION.** On the radial arm, Model ERA, there is a hex headed set screw on the lower side of the barrel both at the front and back. Before rotating the travel arm in the barrel, we suggest that these be loosened about one turn. The reason for this will be understood from a study of the adjustment described in Section "A."

6. After rotating the travel arm sufficiently to make the blade square with the table surface, tighten the four nuts on the barrel and covers bringing them all up together and evenly. **DO NOT FORGET** to retighten the hex headed set screws on the lower side of the barrel. Finally, re-check with the square making sure that the saw blade has not changed its position and that the zero mark on the adapter quadrant has not gone out of line because of hammering.

Lubrication: There are four oilers provided to insure free working of moving parts at all times. One on top of hand wheel in center of adjusting screw. Oil whenever the hand wheel does not turn freely. One on each end of head of the travel arm barrel. These should not require oil more than three or four times a year. The oiler in top of base bracket should be oiled whenever the base turns hard or when exposed to rain or excess moisture.

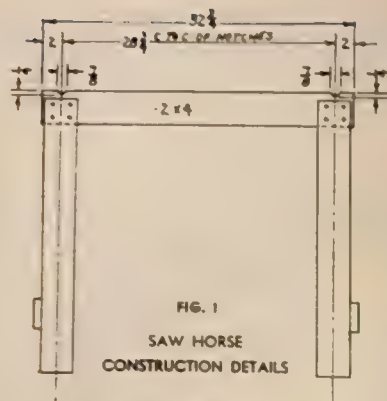
SPEEDMATIC SAW TABLE (Model 5500)

This saw table is a rugged, lightweight unit (44 lbs.) designed for rapid, on-the-site conversion of your SPEEDMATIC Model 507, 508, K-75, K-88C or K-89 into a powerful, large-capacity table saw.

This combination is a real money-saver giving you all the utility of both a portable saw and the table saw at a fraction of the cost of two complete units. Use the portable saw for framing cuts and the table saw for finish trim, etc.

The easily portable SPEEDMATIC Saw Table has been designed for use on saw horses anywhere on the building site or on steel legs which are available as accessory equipment.

The large 26" x 20" table with 45" front and rear rails, provides a maximum ripping capacity of 24½" permitting easy handling of such unwieldy pieces as the 4' x 8' panels so popular in modern construction. Absolute accuracy in finish cuts is assured by heavy duty rip fence and large, fully calibrated miter gauge.



CONSTRUCTION OF SAW HORSES

Figure 1 suggests the size of the saw horses to be used to support the saw table. The leg spread and height can be varied to suit individual requirements if necessary.

It is important that the notches in the top members of the horses be spaced and cut to the dimensions shown to properly accommodate the front and rear rails which rest in them.

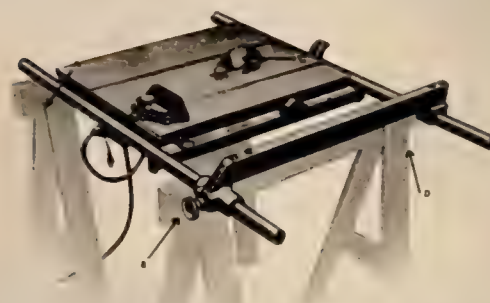


FIG. 2
SPEEDMATIC SAW TABLE
MOUNTED ON SAW HORSES

[Saw Horses Should Be Notched
1/4" at Points A, B, C, D]

SETTING UP THE TABLE

Position the horses on a level surface with their top members parallel and just far enough apart to clear the side members of the table framework. Set the saw table on the horses with the front and rear rails resting in the notches (See Fig. 2). Check the table to make sure it is level. This is absolutely necessary to insure proper functioning of the unit.

The switch box is mounted on the frame under the front of the table for quick, easy operation and to insure safety to the operator.

INSTALLING SPEEDMATIC SAW ON THE TABLE

Snap the slotted Table Insert out of the table top. Grasp front edge of the table, lift up and tilt it back until it rests on the rear rail as shown in Figure 3. Remove Angle Adjusting Knob from the saw and lift off the Angle Adjusting Segment-Base Assembly.

Install saw on the Table Angle Segment and fasten it in place by replacing the Angle Adjusting Knob just removed. Tilt table forward and drop it into the operating position—it automatically locks in this position. Snap Table Insert in place.

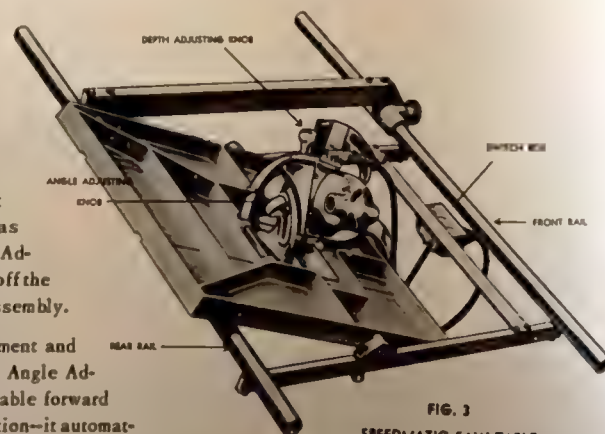


FIG. 3
SPEEDMATIC SAW TABLE
IN POSITION TO ADJUST OR REMOVE SAW

CONNECTING SAW TO POWER SOURCE - Lock saw trigger switch "ON" with a block of wood fitted between handle and saw housing. **MAKE CERTAIN THE SWITCH ON THE SAW TABLE IS IN THE "OFF" POSITION.** Clamp saw cord ground clip on to switch box grounding stud and insert plug in switch box receptacle. Clamp the extension cord ground clip on to the switch box grounding stud and insert the female connector into the switch box receptacle. Clamp the ground clip at the other end of the extension cord onto a screw in the power source outlet box or other suitable ground and then plug the connector into the power source receptacle. **DO NOT RUN THE SAW CONTINUOUSLY — ONLY WHEN CUTTING.** **MAKE CERTAIN THE GROUND CONNECTIONS MAKE GOOD CONTACT TO AVOID SHOCK IN CASE A SHORT CIRCUIT OR GROUND SHOULD DEVELOP IN THE EQUIPMENT.**

ADJUSTING THE SAW FOR CUTTING - Lift up and tilt back the table top and adjust the saw for depth of cut by turning the Depth Adjusting Knob. Adjustments for angular cuts are made by loosening the Angular Adjusting Knob, setting the saw at a desired angle and tightening the Knob.

ADJUSTING RIP FENCE - Loosen Front Slide Knob and Rear Slide Wing Screw, slide fence to desired position and tighten Knob and Screw.

To assure accurate ripping, it is important to check the fence at the front and rear ends with the miter gage groove in the table and lock the front and rear clamps while the fence is held in position.

To remove the fence, loosen the Front Slide Knob and Rear Slide Wing Screw, raise the rear clamp off the rear rail first and then the front clamp from the front rail.

The fence rails extend 17" beyond the edge of the table, making possible a maximum ripping capacity of 24" when the fence is moved to the end of the rails.

ADJUSTING MITER GAGE - The automatic set miter gage is provided with individually adjustable index stops at 90° and 45°. These index stops must be set by adjusting the screws when the gage is squared with the saw and locked in position with the Miter Gage Locking Knob.

To set the gage at angles to either side of the 90° and 45° positions, flip the stop plate up to clear the stops and screws.

ACCESSORY EQUIPMENT FOR SPEEDMATIC SAW TABLES

TABLE LEGS - ATTACHMENT

5508 - For those who prefer not to make a pair of saw horses to support the saw table, a set of four legs, complete with screws, washers and a leveling stud, is available. Figure 4 shows the legs attached to the table. The shelf shown in the figure is not furnished but it is recommended that one be made of 5/8" (min.) plywood. The shelf serves not only as a rack for tools but also adds to the rigidity of the Table Assembly. If a shelf is not desired, it is recommended that cross bracing be installed in its place.



FIG. 4
SPEEDMATIC SAW TABLE
WITH LEGS ATTACHED

ASSEMBLING TABLE LEGS TO THE SAW TABLE - Place the Leg and Bracket Assemblies under the table support frame. Put lock washers on screws which are furnished and insert screws thru holes in brackets and screw into front and rear rip fence rails. Insert remaining screws in holes in sides of brackets and screw into faces of frame cross-piece members. Tighten all screws securely.

Insert flat head leveling screw, with head resting on floor, in whichever leg necessary, and adjust to level table.

SAW GUARD - ATTACHMENT 5502 - The crystal clear plastic saw guard attachment affords protection against contact with the saw blade while the machine is in use.

ASSEMBLING SAW GUARD TO THE TABLE - Set the saw guard clamping element on the rear rail of the saw table and position the guard until the splitter is in line with the saw blade. Tighten clamping element wing screw securely.

DADO TABLE INSERT - PART NO. 9Y-TT - For use on Models K-75, K-88C or K-89 only. For dado work, it is necessary to replace the standard table insert by this special insert with wider slot to accommodate the dado cutters. Installation and removal is made by snapping the plate into or out of the table top opening.

USING YOUR SAW IN HOUSE CONSTRUCTION



START SAWING FIRST - If you plan the job well, you will find that one man - with or without a helper, as the case may require - should be sent to the site ahead of the other mechanics. This man can easily cut enough material in half a day or so to remain thereafter always ahead of the others who place and nail. Girder sections, posts, braces, whalers, floor joists, etc. can all be squared as required, notched, and be ready when the rest of the crew arrives. Where base-

ment window frames are made on the job, or the masons require other carpenter cooperation, this method works particularly well since the first man can keep a watchful eye upon all operations.



ONE MAN SAWS - OTHERS NAIL - Once the job is under way, it is usually wise to keep one man sawing, notching, beveling, mitering, etc. with the SPEEDMATIC SAW. He will be able to keep from four to six carpenters supplied with dimensional material for them to place and nail. Experience has shown this to be a very efficient production plan.

PORTABLE SAW BENCH - Taking time and care to set up a good saw bench for use either with the RADIAL ARM or a portable SPEEDMATIC alone, may prove very profitable. Such a bench may be constructed of lumber screwed and bolted together, or an all-metal frame may be purchased or made. The height of the work bench should be such that the operator's hand with the saw will rest on the surface without strain while sawing. For many men this height closely approximates the height of a nail keg. If special saw horses are made for this purpose, with light scaffold plank reserved for this use, a very practical, easily portable saw bench is the result.

After the saw bench is made, some builders like to mark off the length at 6-inch intervals, with 1-inch markings at the end most often used by the sawyer. If the marked plank has two holes bored at each marking and a short piece of lumber provided with two extruding dowels to fit them is made, a very practical bench stop becomes part of your equipment. Otherwise, a short piece may be tacked down each time a number of pieces of the same length are to be cut.

CUTTING TWO OR MORE PIECES - Where the stock to be cut is thin enough for your SPEEDMATIC saw blade to accommodate two or more pieces, it saves a lot of time to double up on the cutting. Two thicknesses at once may usually be cut when working on shiplay, beaded ceiling, and other stock less than one inch thick. Of course, the total number of pieces to be cut at once depends upon the capacity of your SPEEDMATIC Saw and the nature of the material. As far as hardness of wood is concerned, it makes little difference to a SPEEDMATIC Saw whether the stock is hard or soft.

MARKING THE SECOND PIECE - Set your SPEEDMATIC Saw blade a little deeper than the thickness of the first piece when cutting a number of identical pieces, or to match miters. Then when the top piece is cut off, the under piece will be accurately marked for cutting next. This procedure is especially useful in the cutting of rafters, studs, joists, or in any case where it is necessary to make duplicate pieces of material too thick for cutting more than one thickness at a time with your SPEEDMATIC.



CUTTING HEAVY STOCK - Follow this simple procedure to cut a timber up to twice the depth that your SPEEDMATIC will cut: Mark the point at which it is desired to square off the timber. Measure back the width of the saw base and square down from there to the next edge. Hold the cross-cut gauge even with the second mark, and run the saw through at its full depth. Turn the timber over and hold the gauge even with the third mark, and run the saw through again. The two cuts will coincide and be perfectly square.

CONCRETE FORMS - Whether the concrete forms are built "on the ground" and raised or dropped in place, or when the forms are actually built piece by piece in place, the SPEEDMATIC saves a great deal of sawing time. Where a gang is working in the excavation, one man with the Speedmatic saw can cut all the material to length and keep 4 or 5 carpenters placing and nailing the material he cuts. If the form sections are built before being placed in position, the boards may be nailed on without regard to exact size, except to be sure ends lap over; then with the saw, form section is quickly and conveniently trimmed to size. Using the SPEEDMATIC saw to square all ends eliminates "fins" or projections which might otherwise require later work with cold chisel or carborundum stone.



Cutting 2 x 4's to size in a large-scale concrete form job.



Packet cuts are easy and accurate when made with a Speedmatic.

Whalers, braces and studs are quickly cut to size with the SPEEDMATIC and it is both simple and

practical to cut all the required spacers from scrap sheathing split to 1½ or 2 inch width.

If material is ordered with the thought in mind that it will be used for forms and later in the building, a minimum of waste results. For instance, the studs for forms may be of the height required for inside partition studding; after the concrete has set and forms torn down again, these 2 x 4s show practically no waste. Likewise, sheathing or T&G roofers used on forms may be carefully salvaged and used for subflooring. Whalers and braces may be absorbed in the framing.

In tearing down forms, use of the SPEEDMATIC is often made to cut the sheathing near studs where there seems to be danger of splitting. After the boards are sawed away from corner posts or other places where lumber could not be otherwise salvaged without considerable loss, it is easy to knock off the pieces remaining.



The 10" and 12" Speedmatics are specially designed to handle studding and longer pieces.

STUDDING, SHOES AND PLATES - Pile as many studs as the width of the bench or horses will accommodate, flatwise, with a strip tacked over to hold them tight, and saw the entire lot in one operation. Ends of pieces used for shoes and plates may be squared, likewise the short pieces used for "doubling up" around openings, to make them fit close together in place.

Where exact measurements are required for partition studding, etc., it may pay to make one as a pattern and cut as many other identical pieces as required.

Notches for ribband or ribbon may be quickly cut by setting a number of studs together edgewise against the stops and tacking a strip across the top edges. Set the saw for the required depth and saw across the whole number at each edge of the notch (perhaps a couple of times across the middle part) and clean out with ordinary, sharp chisel. With the use of dado cutters set to the required depth and making several cuts across, the whole notch may be cut out in a clean and speedy manner.

FIRE CUTS - A fire cut is made in floor and ceiling timbers so that, in case of fire, when the timbers burn through in the middle, they will be able to fall out of the masonry without pulling down the walls. The illustration shows one method of making these fire cuts rapidly, accurately, at minimum labor cost. Simply pile the joists one atop the other in three or four rows, being careful that the "crowns" if any, will all set right, in position. Then set the saw slightly deeper than the thickness of the stock, thereby each time "marking" the piece below for the next cut.

PRODUCTION LINE FRAMING - Using feed tables with your SPEEDMATIC Saw and Radial Arm guarantees the utmost in rapid, accurate framing. Locate the feed tables in the center of your two or more house development and one sawing crew can keep several groups of nailers supplied with a continuous flow of studs, plates, headers, joists and rafters. A prepared list of materials, sizes, angles, etc. will put your sawyer's time on an economical as well as highly efficient basis.

RAFTERS - Where a number of rafters are to be identical in length and cuts, they may be stacked the same as studs and sawed all at once. This is particularly true of the common rafters.

The miter cuts on rafters can be easily made, if desired, by making a simple guide of either waste dimension or thinner material, with a piece of 1 x 3 tacked on as shown by the illustration for guiding

the saw base parallel to the desired angle cut. In this case, set the saw blade a little deeper than the thickness of material, to "mark" the piece below. For hip and valley rafters, it is wise to remember that all cuts can be made with the Speedmatic saw, for no angle cut can exceed 45 degrees. A simple way to figure the lengths of hip or valley rafters is to measure on the attic floor plan the distance in feet and decimals of feet, from the corner of building to a point directly below where the hip or valley rafter joins the ridge; square this figure (multiply it by itself), then likewise square the rise or distance from plate top surface to ridge. Add the two squares together and extract the square root of these combined figures. The table of squares and square roots given here will be found helpful in this operation. All measurements should be made from center to center, along the center line of the rafter.



The compound miters for jack rafters are easily made with the SPEEDMATIC, because it is perfectly balanced on its large base at any angle. Where several pieces are to be cut exactly alike, a great amount of sawing time can be saved because the angle of sawing will be the same for all pieces and only the first pair need be laid out as patterns. A guide of two pieces of 1 x 2 may be made quickly, if desired, and if the piece nearest saw operator is made long enough to take the first cut with the first rafter, it will act as an automatic guide and measure on succeeding pieces.

Notching rafter for the plates is easily accomplished by making a pattern or laying out one and "marking" the one below each time, as previously noted for joists. Just make the vertical angle cut parallel with the ridge cut, then finish the notch by cutting into the stick at right angles to the vertical cut. This operation can be done very quickly by laying out a number of rafters on edge, tacking them together with a strip of light material, and making the cuts on all the sticks at one time. Of course, the outside cut, whether for open cornice or for some types of other work, is always exactly parallel to the vertical ridge cut. Where a Colonial style finish is desired, the cut for rafter end resting upon the plate will be, naturally, at right angles to the ridge vertical cut.

TABLE OF SQUARE ROOTS

No.	Square Root	No.	Square Root	No.	Square Root	No.	Square Root	No.	Square Root	No.	Square Root
25	5.	350	18.70	850	29.15	1350	36.74	2100	45.82	3200	56.57
50	7.071	400	20.	900	30.	1400	37.42	2200	46.90	3400	58.30
75	8.66	450	21.21	950	30.82	1450	38.08	2300	47.95	3600	60.
100	10.	500	22.36	1000	31.62	1500	38.73	2400	48.99	3800	61.64
125	11.18	550	23.45	1050	32.40	1550	39.37	2500	50.	4000	63.24
150	12.25	600	24.49	1100	33.16	1600	40.	2600	50.99	4200	64.80
175	13.23	650	25.46	1150	33.91	1700	41.23	2700	51.96	4400	66.32
200	14.14	700	26.46	1200	34.64	1800	42.43	2800	52.91	4600	67.82
250	15.81	750	27.39	1250	35.36	1900	43.59	2900	53.85	4800	69.28
300	17.32	800	28.28	1300	36.06	2000	44.72	3000	54.77	5000	70.72

FIRE STOPS - In many sections, local or State requirements call for fire stops at floor and/or ceiling levels. The purpose of these is to stop a draft up through the walls, thereby helping to prevent fires spreading. Authorities state that a high percentage of residential fires, as well as some other types of conflagrations, start in the basement, and the use of fire stops helps keep the fire in one section until the fire department or someone can extinguish it. What some Contractors do not know, is that wooden blocks may be used in localities where the building code mentions masonry fire stops; to be certain of this, be sure to consult your local building inspector or his department, asking if timber fire stops may be used instead of masonry fire stops. Where this is allowed, joists and like size timbers may be ordered a little longer (where there is no premium for this additional length); sixteen inches o.c. being the common spacing for joists, leaves 14-1/4 inches as the length of each piece of fire stop required. Thus, by ordering longer stock on the joists, the ends cut off with the SPEEDMATIC (which also gives you a nice job of framing) will be utilized for the fire stops. Placing these timber fire stops has other advantages, too, as in the case of diagonal subflooring, they provide a nailing surface and help to shut out rodents from the walls, etc., besides providing a fine reinforcement feature between the joists. It is easy to see that using the electric hand saw to cut the timber fire stops may be cheaper than paying a mason and helper to place brick, concrete or other masonry fire stops.

BRACES, COLLAR BEAMS, BRIDGING - FHA requirements in many localities (if not all) call for either diagonal sheathing and subflooring, or rather extensive bracing. The Builder can best decide which he prefers to do, increase the amount of sheathing to be used by 8 or 10 percent, plus increasing labor cost by 10 percent or more, or spend the extra required for braces. In either case the SPEEDMATIC portable saw will help to make up a large part of the difference, for diagonal cuts of sheathing along the center line of the joist, stud or rafter, is easy with the SPEEDMATIC. Its design simplifies vertical cutting in the case of braces, a dado head in the SPEEDMATIC will quickly notch upright studs to accommodate the diagonal braces "set in."

For collar beams, the man who cuts rafters can at the same time make the collar beams.

Bridging may be fitted at the actual joists or, in case of partition stiffening, at the wall, or it may be cut to a general pattern first determined, making a number of pieces at a time. Either method results in a considerable saving when using the SPEEDMATIC instead of the old style hand saw, or "muscle" saw.



The right-hand blade and big, broad base on the Speedmatic provide added safety when cutting roof hangers.

SHEATHING, SUBFLOORING, ETC. - Since the FHA requirements as to diagonal sheathing have been incorporated into many private lending company specifications, it is well here to note that the SPEEDMATIC Saw saves a great deal of time on this work. Either the boards may be nailed on and allowed to project beyond the corners, to be later sawed off with the light weight SPEEDMATIC, or one man can cut for four or five others who are placing and nailing. Sheathing, whether sidewall or roof, should be started at the left and worked to the right. This permits cutting off the overhang with the saw base supported and cutting in a normal right-hand position. In the case of sheathing, T&G roofers, etc., less than 1-in. in ac-



Hold the stock with one hand, the saw with the other. Speedmatic is a genuine one-hand saw.

tual thickness, more than one piece can be cut at a time. Also, where ends are to be squared, or a number of pieces of identical size are required, the stock may be piled up and a dozen or more pieces cut at one sawing. With a 16-in. measurement on the sawing bench, or on a separate piece near the sawyer, odd lengths and stray pieces can quickly be cut to fit on the rafters, joists or studs, pieces which would otherwise never be used. Squaring of ends for roof sheathing is easily done by passing each piece of roofer thru the saw operator's hands where he makes the square cut in a few seconds.

On gable ends, cutting up the rake with the SPEEDMATIC is quick and simple. Another time-saving idea is cutting the last board at the ridge. Nail the last board in place and strike a line to jibe with opposite side, set the SPEEDMATIC at proper bevel and cut the whole length at one time.

SPECIAL NOTES ON ROOFING - Hip roof sheathing may be laid out on the ground and cut before being placed and nailed, or it may be simpler to cut or trim the hip line after the sheathing is nailed in place. In either case, by setting the saw to proper bevel these cuts are quickly and mechanically well made—better than by hand, without the inconvenience experienced otherwise. The same general ideas apply to valleys, with such mechanical changes as every good carpenter understands.

One good and quick method for hip roofs is to sheathe the two opposite sides of the hip roof first, letting the boards project at random at the hips. Then strike a line down the center of the hip, set the SPEEDMATIC Saw at the proper bevel for the cut with just enough depth to cut through the sheathing, and saw the whole length of the hip. The other two sides are done in the same way, except that the boards are not nailed at the hip but allowed to ride up over the slight projection of the previously placed sheathing. Again set the SPEEDMATIC Saw and make the cut so that the ends of the last roofers placed will drop into place and then nailed, making a nice tight mechanical job.

OUTSIDE TRIM - With a planer blade for smooth cuts, siding may be mitered several times as fast as by hand, or it can be cut to fit in a mechanical manner at the corner boards. Likewise, the corner boards, water table (if used), belt course, matched or beaded ceiling, fascia, boxing, porch columns, eaves trough, and any number of other items of outside trim are easily and quickly handled with the SPEEDMATIC. If the SPEEDMATIC Radial Arm is on hand, this will be found a great help in outside trim work.

Porch work of all kinds is speeded up, too, with this portable power saw. Outside steps, including the routing of strings with a dado head, will be made in less time, just as accurately as by the finest mechanic.

Lattice frames may be quickly put together with the automatic square cut of the saw, fastened with crimps as well as nails, or corners joined in one of several styles favored by the modern carpenter. Nail on the lattice strips, spacing between with another piece of lattice, then set the saw to proper depth and cut at ends in a jiffy.

INTERIOR CONSTRUCTION - The SPEEDMATIC Saw continues to be the best tool available for cutting partitioning, furring strips, door and fireplace headers, etc. The Radial Arm becomes doubly valuable in mitering interior trim such as door and window casings, baseboard and ceiling moulding. For

general inside finishing, the SPEEDMATIC Saw Table becomes almost a necessity. Outstanding savings in time and costs can be realized when builders also make use of the other quality SPEEDMATIC woodworking tools that are available through local dealers. These include the SPEEDMATIC Router, Shaper, Lock Mortiser, Door Plane, Stair Templet, Hinge Butt Templet and Lock Face Templet. These are the finest tools available for their intended uses and in production will pay for themselves many times over.

INSIDE TRIM - Mitering either at the point where two pieces are joined or for corners, the SPEEDMATIC Saw will be found of material aid in placing base, base mould and shoe moulding.

Door and window trim, if bought in standard lengths, may be quickly cut with the precision usually found only in mill cut trim. The planer or hollow ground blade is fine for this.

Trimming the starters or endpieces and cutting out floor openings after nailing, are two fine uses for the portable SPEEDMATIC hand saw. Setting the blade to a depth equal to the thickness of the flooring enables the operator to just cut through the flooring without marring or breaking below; this is particularly useful when and kind of trap door is to be concealed in the floor or for inlaying borders, etc. For inlaying a border into hardwood flooring, using a different color wood, the SPEEDMATIC Saw is almost a necessity unless extra money is paid out for special border effects.



Making a pocket cup for a trap door installation.

MOULDINGS - For both exterior and interior mouldings, use of the Radial Arm or Model 5500 Saw Table will be found practical or the SPEEDMATIC without Radial Arm may be used if the bevel is carefully determined. With this portable electric power saw it is possible to make unusual cuts which hold a little better than straight miters. For instance, an arrow-shaped joint for mouldings, easily cut with the SPEEDMATIC Saw, holds tighter than a straight miter yet requires practically no extra time or effort to make.



Dado cutting for shelving, using crosscut guide for accuracy.



Grooving door end for weatherstrip with dado cutters.

DADO, GROOVE, PLOUGH, TENON - The construction of the SPEEDMATIC saw permits very accurate depth setting. The fine screw adjustment maintains an accurate setting indefinitely. Dado cuts of practical size can be made in a single sawing operation. This makes it invaluable for cabinet work, weather-strip installations, stair stringers, sash and many other jobs of a similar nature. The dado heads which are manufactured for the SPEEDMATIC Saws are adjustable in width and with proper depth adjustment the speed of the saw cleans out the stock, leaving smooth sides and bottoms. Dado cuts may be made at any angle. Models 507 and 508 cannot be equipped to take dado cutters.



Notch work is done quickly and accurately with a Speedmatic.



Equipped with dado cutters, the Speedmatic notches stair stringers, minimizes tedious chisel work.

Attic and cellar stairs, sometimes called semi-finish and rough stairs, respectively, are easily cut out with this modern tool. Since the kind of lumber makes but little difference to the efficiency of the saw, hardwood treads may be used for back or attic stairs, servants' quarters steps, etc., without as great an extra charge as usual for this extra quality.



Using an abrasive wheel to channel a brick wall for conduit installation.



Cutting a welded steel pipe, using an abrasive wheel on a Speedmatic.

bricks and blocks for wedging or pointing. Contact your local abrasive wheel supplier for the proper abrasive wheel for your specific job.

USING THE ABRASIVE CUTTING WHEEL

When you replace the saw blade with the abrasive cutting wheel, your SPEEDMATIC offers you further construction services. You can cut aluminum, galvanized or copper flashing, terrazzo, and ceramic, asphalt, or rubbertile. You can score tile, brick, cinder block, flagstone and softer varieties of fieldstone. In remodeling work, use the abrasive wheel to cut out mortar and brick sections for doors, windows, and conduit, or to cut mortar from between

COMPOSITION WALLBOARDS, PLYWOOD, ETC. - Using a special blade where required, all the cutting on this type of material may be done with the SPEEDMATIC with a great saving in time. Where entire walls are to be made of a single piece of plywood, door and window openings may be easily and conveniently sawed out either before or after erection of the large unit of material. With the saw set to the depth of the plywood or composition material, cutting proceeds rapidly and efficiently without marring any other material. The SPEEDMATIC holds any depth set positively. Starting to saw at the surface of the plywood or wallboard is a great convenience.



Speedmatics speed through difficult cuts on composition boards and other hard materials.

Artificial tile, marble, artstone, marble sills and lintels, etc., are also easily grooved or cut with the proper saw or abrasive disc.

Without going into the long list of trade names in this group of products suffice it to say that almost anything of a sheet nature may be cut with the SPEEDMATIC Saw when this power is required, at a faster, more efficient rate.

OPENINGS - Openings of all kinds in erected walls may be speedily cut by use of the SPEEDMATIC Saw. Door or window openings in plywood section walls, cutting for medicine cabinet, ironing boards, to cut down floor joists where subfloor is to be installed for the tilesetter, etc., are only a few uses for this modern tool on the job. Wherever a carpenter usually likes to avoid a sawing job — any kind of opening to be cut from one or both sides of wall or floor — this SPEEDMATIC Saw is most efficient, as it may be set to an exact depth and sets solidly on its large base for accurate, quick cutting.

ALTERATIONS - Where partitions are to be removed, new additions to be made to existing construction, and for practically all other alterations, modernizations and changes, the SPEEDMATIC Saw will be found most useful. With this portable electric hand saw a cut can be made into existing construction without first boring or cutting to make room, as the SPEEDMATIC's Saw blade starts cutting at the surface.

CABINETWORK - For regular cabinetwork, the SPEEDMATIC Saw is exceptionally useful because of its accuracy and high speed. In making fine joints, it requires either a very experienced man, or the precision found in this machine to create the best fitting. All regular cabinet ideas may be duplicated and unusual or specially designed cabinets built, almost at the cost of mill-made pieces. In addition, panelwork of various kinds, inlays, and ideas requiring considerable lengths of ripped material are all brought within the reach of the average good job in this way.

FITTING DOORS, MAKING YOUR OWN JAMBS, ETC. - Sawing off the horns of doors of all kinds, beveling, fitting sash where required, making jambs and simple frames, all will be speeded up by using the SPEEDMATIC electric hand saw.

//

REPAIR INSTRUCTIONS

If any trouble develops, read instructions carefully. If repairs are beyond your facilities, send your saw to the nearest Porter-Cable Authorized Service Station or Factory Service Branch. (See list on Page 36) Our Service Stations and Factory Service Branches carry complete stocks of repair and replacement parts for prompt service.

MOTOR - Inspect motor brushes frequently to see that they slide freely in the brush holders, and are not worn too short for proper contact with commutator. Replace brushes when they are worn to 1/4" in length.

GEARS - If it is necessary to remove the jackshaft assembly on the BK-10 or BK-12, remove the front guard, saw blade and the screws in the gear housing cover. Then place a 3/4" thick wooden block either side of the gear housing cover, place saw blade and nut on the jackshaft. By holding the shaft with the hex wrench and turning the nut with the open end wrench the assembly can be easily removed. Please do not attempt to pry the housings apart with screw drivers and similar tools as they will damage the machined surfaces and cramp the parts.

It is good business to have your electrical tools examined occasionally by your nearest authorized service station or factory service branch. Periodic inspection will reduce the cost of maintenance and keep your machine in first class working condition. Order parts and repairs from the service station or factory service branch nearest you.

By following the above instructions your saw will give you long continued service.

PARTS LIST

SPEEDMATIC SAW

Model 507

Part No.	Pcs. Reqd.	Part
1-K75	1	Housing - Motor
2-K75	1	Housing - Gear
3-K75	1	Cover - Gear Housing
5-K75	1	Segment - Angle Adjusting
11A-K75	1	Base - Saw
24-K75	1	Gib
28-K75	2	Holder - Brush
29-K75	2	Cap - Brush
30-K75	2	Brush and Spring
65-K75	1	Guide - Cross Cut
80-K75	1	Bearing - Inner Jackshaft Ball
81-K75	1	Bearing - Outer Jackshaft Ball
82-K75	1	Bearing - Armature Commutator End Ball
83-K75	1	Bearing - Armature Gear End Ball
90-K75	1	Jackshaft
91-K75	1	Washer - Saw Retaining
133-K75	1	Slide - Depth Adjusting
136-K75	1	Knob - Depth Adjusting Lock
137-K75	1	Cover - Handle Front
§ 139-K75	1	Nameplate
140-K75	1	Spring - Stabilizer
141-K75	1	Guard - Swing
14-K8	1	Spring - Swing Guard Control
34-K8	1	Plate - Instruction
19-K9	1	Nut - Jackshaft Bearing Retaining
20-K9	1	Guide - Rip
27-K66	1	Switch
12-K88	1	Knob - Angle Adjusting
21-K88	1	Stud - Angle Adjusting Knob
22-K88	2	Pin - Base Dowel
23-K88	1	Insulator - Switch
4-K89	1	Baffle - Air
5-K89	1	Armature - 115 V
§ 5A-K89	1	Armature - 230 V
* 6-K89	1	Pinion
* 7-K89	1	Gear - Jackshaft
10-K89	1	Case - Carrying
§ 11-K89	1	Field - 115 V
11A-K89	1	Field - 230 V
22-K89	1	Stop - Depth Adjusting Slide
170-X	1	Pin - Swing Guard Adjusting
192-X	4	Washer - Gear Housing Cover Screw Lock
238-X		Wrench - Bumper Adjusting
293-X	3	Nut - Gib Screw Lock
305-X	4	Screw - Saw Base and Segment Retaining
306-X	3	Screw - Saw Handle Retaining
385-X	2	Washer - Brush Holder
392-X	1	Cup - Gear Housing Grease
405-X	1	Screw - Depth Slide Stop Retaining
406-X	2	Screw - Rip Guide Lock
424-XA	1	Key - Jackshaft Gear
439-XA	4	Screw - Field and Brush Holder Lock
621-X	1	Screw - Saw Handle Right Rear
§ 629-X	2	Screw - Field Side Lock
630-X	1	Washer - Ground Wire Screw Lock
673-X	1	Reliever - Cord Strain
673-XA	1	Sleeve - Cord Strain Reliever
758-X	1	Washer - Depth Adjusting Slide Lock Knob
830-X	2	Screw - Switch Retaining
922-X	1	Plug - Armature Commutator End Bearing Grease
989-X	3	Screw - Front Guard Retaining
1100-X	1	Nut - Armature Pinion Retaining

Part No.	Pcs. Reqd.	Part
1142-X	4	Screw - Gear Housing Retaining
1143-X	4	Screw - Gear Housing Cover Retaining
1144-X	1	Cord - 10 Ft., 3-Wire with Plug
§ 1188-X	4	Screw - Nameplate Retaining
1190-X	4	Screw - Handle Front Cover Retaining
1191-XA	1	Washer - Jackshaft Bearing Spacer
1246-X	1	Plug - Cord
1287-X	5	Terminal - Solderless
1526-X	1	Screw - Segment 45° Angle Adjusting Set
1607-X	3	Screw - Gib Adjusting
1614-X	1	Screw - Ground Wire
1814-X	1	Pin - Swing Guard Control Spring Anchor
1858-X	1	Clip - Ground
1903-X	4	Rivet - Instruction Plate Retaining
1931-X	1	Wrench - Saw Retaining Screw

ASSEMBLIES

37Y-A6	1	Saw Retaining Screw Assembly
15Y-A8	1	Swing Guard Bumper
5AY-K75	1	Swing Guard Hinge Pin Assembly
19Y-K75	1	Depth Adjusting Lock Plate and Stud Assembly
§ 20Y-K75	1	Jackshaft and Gear Assembly w/ Pinion
21Y-K75	1	Saw Handle
22Y-K75	1	Front Guard
§ 3Y-K89	1	Armature Assembly - 115 V
26-YX		Grease - 8 Oz. Tube

SAW BLADES

§ 30-K46		5" Blade for Masonite and Plywood
33-K75	1	Combination Blade
34-K75		Rip Blade
§ 35-K75		Planer Blade
§ 39-K75		7½" Blade for Masonite and Plywood
§ 70-K75		Hi-Speed Inserted Tooth Blade
§ 1749-X		Steel Bits for Inserted Tooth Blade
§ 1750-X		Shanks for Inserted Tooth Blade
§ 115-K75		Abrasive Cut-Off Blade For Metal
§ 122-K75		All-Purpose Blade
§ 124-K75		Carbide-Tipped Blade

FOR AREAS REQUIRING 3-PRONG PLUGS (Other Than Canada)

§ 29Y-BB10		3-Wire Cord with 3-Prong Plug
§ 323-X		Adapter - 3 to 2 Prong With 6" Ground Lead
1858-X		Clip - Ground (For Use on Ground Lead of 323-X)

SPECIAL GUARDS FOR USE IN D.C. ONLY

§ 60-K75		Screw - Auxiliary Guard Adjusting
§ 61-K75		Guard - Auxiliary
§ 1662-X		Washer - Auxiliary Guard Adjusting Screw
§ 15Y-K75		Safety Swing Guard Assembly
§ 16Y-K75		Base Assembly
§ 17Y-K75		Base and Segment Assembly

§ Not shown in diagram.

* Pinion and Jackshaft Gears are Matched and Sold in Sets Only.

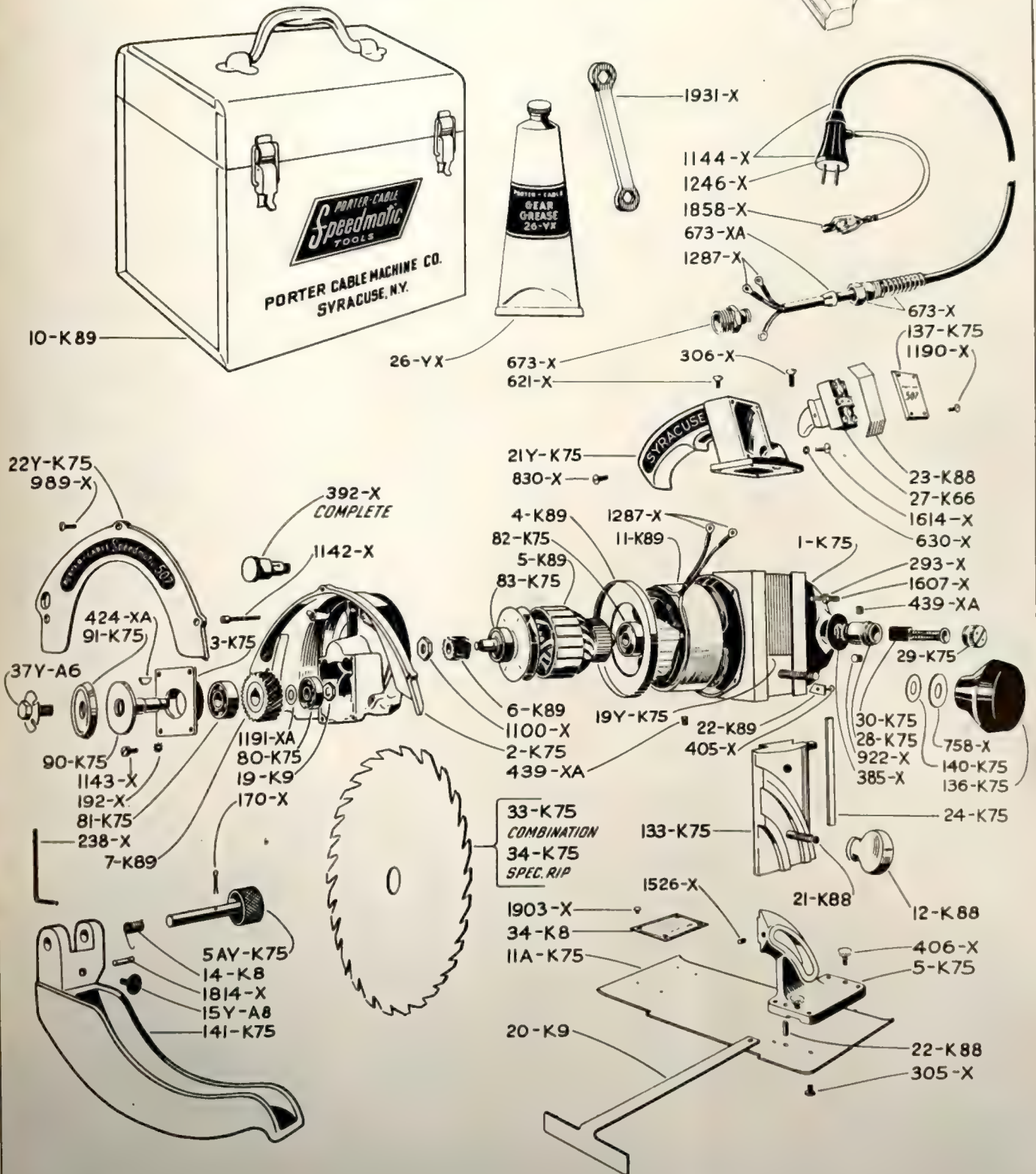
Our authorized service stations carry parts in stock. Order from them giving serial No. or series letter of machine.

Terms: Cash with order or C.O.D. unless you have established open account with us.

When ordering parts be sure to specify the SERIAL NUMBER OR SERIES LETTER as well as the TYPE of your machine, as shown on the name plate.

We cannot guarantee repairs made outside of our plant, or Electrical Parts unless installed by us or one of our authorized service stations. Periodic inspections by one of our authorized service stations will prolong the life of your machine and reduce the cost of maintenance.

PORTER-CABLE **SPEEDMATIC SAW** Model 507



PARTS LIST

SPEEDMATIC SAW

Model 508

Part No.	Pcs. Reqd.	Part
2-K89	1	Housing - Gear
4-K89	1	Baffle - Air
5-K89	1	Armature - 115 V
5A-K89	1	Armature - 230 V
6-K89	1	Pinion
7-K89	1	Gear - Jackshaft
9-K89	1	Cover - Gear Housing
10-K89	1	Case - Carrying
11-K89	1	Field - 115 V
11A-K89	1	Field - 230 V
21-K89	1	Cover - Handle Front
22-K89	1	Stop - Depth Adjusting Slide
32-K89	1	Nameplate
8-A8	1	Guard - Swing
14-K8	1	Spring - Swing Guard Control
34-K8	1	Plate - Instruction
19-K9	1	Nut - Jackshaft Bearing Retaining
20-K9	1	Guide - Rip
27-K66	1	Switch
1-K75	1	Housing - Motor
5-K75	1	Segment - Angle Adjusting
11A-K75	1	Base - Saw
24-K75	1	Gib
28-K75	2	Holder - Brush
29-K75	2	Cap - Brush
30-K75	2	Brush and Spring
65-K75	1	Guide - Cross Cut
80-K75	1	Bearing - Inner Jackshaft Ball
81-K75	1	Bearing - Outer Jackshaft Ball
82-K75	1	Bearing - Armature Commutator End Ball
83-K75	1	Bearing - Armature Gear End Ball
90-K75	1	Jackshaft
91-K75	1	Washer - Saw Retaining
133-K75	1	Slide - Depth Adjusting
136-K75	1	Knob - Depth Adjusting Lock
140-K75	1	Spring - Stabilizer
12-K88	1	Knob - Angle Adjusting
21-K88	1	Stud - Angle Adjusting Knob
22-K88	2	Pin - Base Dowel
23-K88	1	Insulator - Switch
170-X	1	Pin - Swing Guard Adjusting
192-X	4	Washer - Gear Housing Cover Screw Lock
238-X		Wrench - Bumper Adjusting
293-X	3	Nut - Gib Screw Lock
305-X	4	Screw - Saw Base and Segment Retaining
306-X	3	Screw - Saw Handle Retaining
385-X	2	Washer - Brush Holder
392-X	1	Cup - Gear Housing Grease
405-X	1	Screw - Depth Slide Stop Retaining
406-X	2	Screw - Rip Guide Lock
424-XA	1	Key - Jackshaft Gear
439-XA	4	Screw - Field and Brush Holder Lock
621-X	1	Screw - Saw Handle Right Rear Retaining
629-X	2	Screw - Field Side Lock
630-X	1	Washer - Ground Wire Screw Lock
673-X	1	Reliever - Cord Strain
673-XA	1	Sleeve - Cord Strain Reliever
758-X	1	Washer - Depth Adjusting Slide Lock Knob
802-X	1	Cord - 10 Ft., 3-Wire With Plug
830-X	2	Screw - Switch Retaining
922-X	1	Plug - Armature Commutator End Bearing Grease

Part No.	Pcs. Reqd.	Part
989-X	3	Screw - Front Guard Retaining
1100-X	1	Nut - Armature Pinion Retaining
1143-X	4	Screw - Gear Housing Cover Retaining
1188-X	4	Screw - Nameplate Retaining
1190-X	4	Screw - Handle Front Cover Retaining
1191-XA	1	Washer - Jackshaft Bearing Spacer
1246-X	1	Plug - Cord
1288-X	5	Terminal - Solderless
1526-X	1	Screw - Segment 45° Angle Adjusting Set
1607-X	3	Screw - Gib Adjusting
1614-X	1	Screw - Ground
1807-X	4	Screw - Gear Housing Retaining
1814-X	1	Pin - Swing Guard Control Spring Anchor
1858-X	1	Clip - Ground
1903-X	4	Rivet - Instruction Plate Retaining
1931-X	1	Wrench - Saw Retaining Screw

ASSEMBLIES

37Y-A6	1	Saw Retaining Screw Assembly
15Y-A8	1	Swing Guard Bumper
5AY-K75	1	Swing Guard Hinge Pin Assembly
19Y-K75	1	Depth Adjusting Lock Plate and Stud Assembly
21Y-K75	1	Saw Handle
3Y-K89	1	Armature Assembly - 115 V
6Y-K89	1	Jackshaft and Gear Assembly w/Pinion
7Y-K89	1	Front Guard
26-YX		Grease - 8 Oz. Tube

SAW BLADES

10-K88C	1	Combination Blade
11-K88C		Rip Blade
12-K88C		Planer Blade
39-K75		7/8" Blade for Masonite and Plywood
70-K75		Hi-Speed Inserted Tooth Blade
1749-X		Steel Bits For Inserted Tooth Blade
1750-X		Shanks For Inserted Tooth Blade
12-K89		Carbide Tipped Blade
15-K89		All-Purpose Blade
21-A8		Abrasive Cut-Off Blade for Metal

FOR AREAS REQUIRING 3-PRONG PLUGS (Other Than Canada)

29Y-BB10		3-Wire Cord With 3-Prong Plug
323-X		Adapter - 3 to 2 Prong With 6" Ground Lead
1858-X		Ground Clip (For Use on Ground Lead of 323-X)

SPECIAL GUARDS FOR USE IN D.C. ONLY

60-K75		Screw - Auxiliary Guard Adjusting
16Y-K75		Special Base Assembly
17Y-K75		Base and Segment Assembly
21-K88C		Guard - Auxiliary
22Y-K88C		Safety Swing Guard Assembly
1662-X		Washer - Auxiliary Guard Adjusting Screw

δ Not shown in diagram.

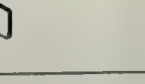
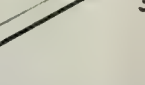
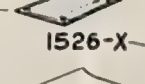
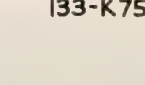
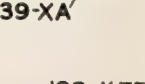
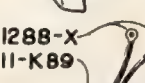
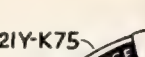
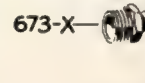
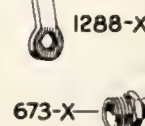
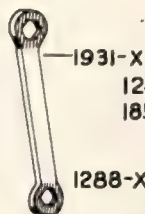
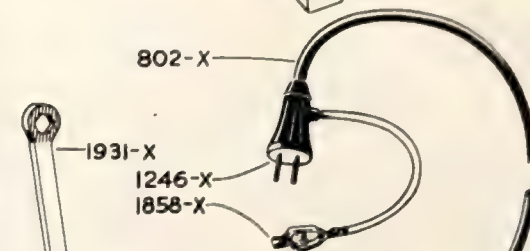
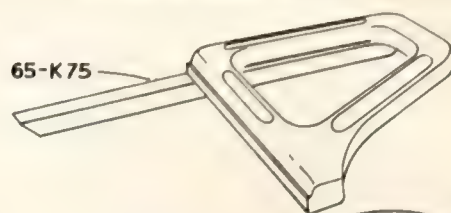
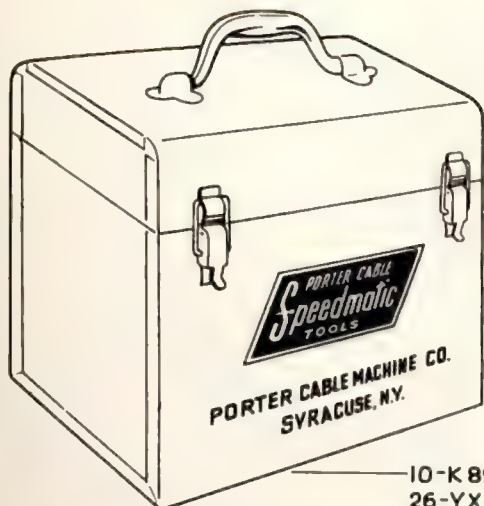
* Pinion and Jackshaft Gears are Matched and Sold in Sets Only.

Our authorized service stations carry parts in stock. Order from them giving serial No. or series letter of machine. Terms: Cash with order or C.O.D. unless you have established open account with us.

When ordering parts be sure to specify the SERIAL NUMBER OR SERIES LETTER as well as the TYPE of your machine, as shown on the name plate.

We cannot guarantee repairs made outside of our plant, or Electrical Parts unless installed by us or one of our authorized service stations. Periodic inspections by one of our authorized service stations will prolong the life of your machine and reduce the cost of maintenance.

PORTER-CABLE SPEEDMATIC SAW Model 508



989-X

7Y-K89

392-X

2-K89

1807-X

10-K89

26-YX

830-X

4-K89

82-K75

5-K89

6-K89

1100-X

83-K75

629-X

439-XA

19Y-K75

10-K88C

1903-X

34-K8

1526-X

11A-K75

20-K9

305-X

1814-X

15Y-A8

8-A8

5AY-K75

14-K8

238-X

1191-XA

7-K89

81-K75

9-K89

170-X

424-XA

37Y-A6

91-K75

90-K75

1143-X

192-X

1807-X

7Y-K89

989-X

10-K89

26-YX

830-X

4-K89

82-K75

5-K89

6-K89

1100-X

83-K75

629-X

439-XA

19Y-K75

10-K88C

1903-X

34-K8

1526-X

11A-K75

20-K9

305-X

1814-X

15Y-A8

8-A8

5AY-K75

14-K8

238-X

1191-XA

7-K89

81-K75

9-K89

170-X

424-XA

37Y-A6

91-K75

90-K75

1143-X

192-X

1807-X

7Y-K89

989-X

10-K89

26-YX

830-X

4-K89

82-K75

5-K89

6-K89

1100-X

83-K75

629-X

439-XA

19Y-K75

10-K88C

1903-X

34-K8

1526-X

11A-K75

20-K9

305-X

1814-X

15Y-A8

8-A8

5AY-K75

14-K8

238-X

1191-XA

7-K89

81-K75

9-K89

170-X

424-XA

37Y-A6

91-K75

90-K75

1143-X

192-X

1807-X

7Y-K89

989-X

10-K89

26-YX

830-X

4-K89

82-K75

5-K89

6-K89

1100-X

83-K75

629-X

439-XA

19Y-K75

10-K88C

1903-X

34-K8

1526-X

11A-K75

20-K9

305-X

1814-X

15Y-A8

8-A8

5AY-K75

14-K8

238-X

1191-XA

7-K89

81-K75

9-K89

170-X

424-XA

37Y-A6

91-K75

90-K75

1143-X

192-X

1807-X

7Y-K89

989-X

10-K89

26-YX

830-X

4-K89

82-K75

5-K89

6-K89

1100-X

83-K75

629-X

439-XA

19Y-K75

10-K88C

1903-X

34-K8

1526-X

11A-K75

20-K9

305-X

1814-X

15Y-A8

8-A8

5AY-K75

14-K8

238-X

1191-XA

7-K89

81-K75

9-K89

170-X

424-XA

37Y-A6

91-K75

90-K75

1143-X

192-X

1807-X

7Y-K89

989-X

10-K89

26-YX

830-X

4-K89

82-K75

5-K89

6-K89

1100-X

83-K75

629-X

439-XA

19Y-K75

10-K88C

1903-X

34-K8

1526-X

11A-K75

20-K9

305-X

1814-X

15Y-A8

8-A8

5AY-K75

14-K8

238-X

1191-XA

7-K89

81-K75

9-K89

170-X

424-XA

37Y-A6

91-K75

90-K75

1143-X

192-X

1807-X

7Y-K89

989-X

10-K89

26-YX

830-X

4-K89

82-K75

5-K89

6-K89

1100-X

83-K75

629-X

439-XA

19Y-K75

PARTS LIST

SPEEDMATIC SAW

Type BK10 Series B

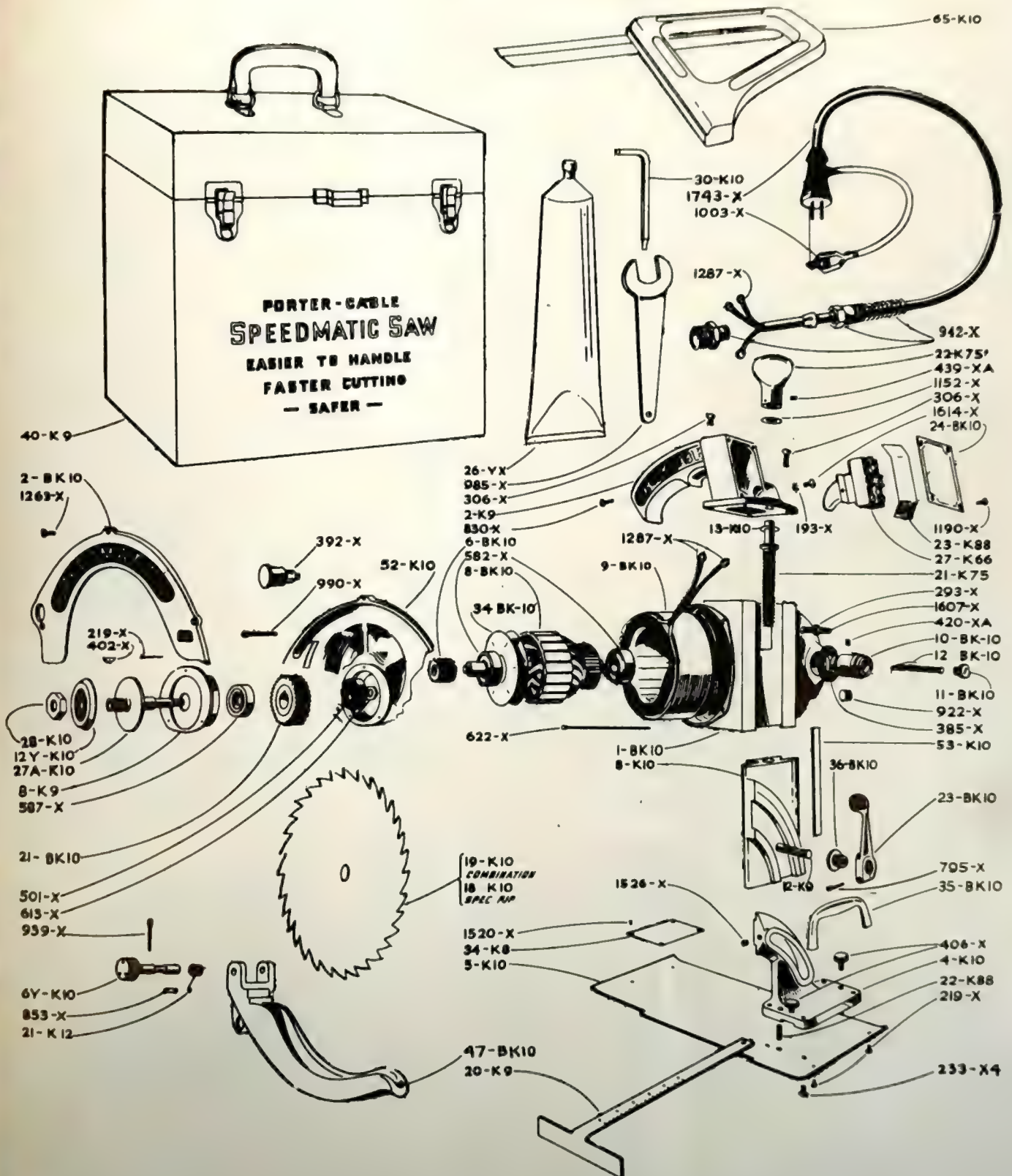
Part No.	Pcs. Reqd.	Part	Part No.	Pcs. Reqd.	Part
1-BK10	1	Frame	392-X	1	Cup - Grease
2-BK10	1	Guard - Front	402-X	1	Key - Jackshaft Gear
• 6-BK10	1	Pinion (See 7-BK10 and 21-BK10)	406-X	2	Screw - Rip Guide Lock
8-BK10	1	Armature - 110 Volt	420-XA	2	Screw - Brush Holder Lock
8A-BK10	1	Armature - 220 Volt	439-XA	1	Screw - Depth Adj. Knob Set
9-BK10	1	Field - 110 Volt	501-X	1	Bearing - Jackshaft Inner Ball
9A-BK10	1	Field - 220 Volt	582-X	2	Bearing - Armature Ball
10-BK10	2	Holder - Brush	587-X	1	Bearing - Jackshaft Outer Ball
11-BK10	2	Cap - Brush	613-X	1	Nut - Jackshaft Inner Bear'g Ret.
12-BK10	2	Brush	622-X	2	Screw - Field Ret.
• 21-BK10		Gear - Jackshaft Solid (with Pinion 6-BK10)	795-X	1	Screw - Angle Adj. Lever Lock
23-BK10	1	Lever - Angle Adjusting	830-X	2	Screw - Switch Ret.
24-BK10	1	Name Plate	853-X	1	Pin - Swing Guard Spring Anchor
34-BK10	1	Fan - Armature	922-X	1	Plug - Commutator Bear'g Grease
35-BK10	1	Handle - Auxiliary	939-X	1	Pin - Swing Guard Hinge Pin Lock
36-BK10	1	Bushing - Angle Adjusting Lever	942-X	1	Reliever - Cord Strain
40-BK10	1	Nut - Radial Arm Adapter	990-X	4	Screw - Gear Housing Ret.
§ 43-BK10	1	Spring - Jackshaft Brg. Loading	1003-X	1	Clip - Ground Wire (Use 1858-X)
47-BK10	1	Guard - Swing	1152-X	1	Washer - Depth Adj. Screw
4-K10	1	Segment - Angle Adj.	1190-X	4	Screw - Switch Cover Ret.
5-K10	1	Base - Saw	1246-X	1	Plug - Cord
8-K10	1	Slide - Depth Adj.	1263-X	3	Screw - Front Guard Ret.
13-K10	1	Washer - Depth Adj. Screw	1287-X		Terminal
27A-K10	1	Jackshaft	1520-X	4	Screw - Instruction Plate
28-K10	1	Nut - Saw Ret.	1526-X	1	Screw - 45° Angle Adj.
30-K10	1	Wrench - Comb'at'n Screw Driver	1607-X	3	Screw - Gib. Adj.
46-K10	1	Jackshaft (Special Long for Dado Cutter 1-3/16" Std. Width)	1743-X	1	Cord - 3 Wire 10 Ft. Long
52-K10	1	Housing - Gear	1858-X	1	Clip - Ground Wire
53-K10	1	Gib	1924-X	1	Wrench - Saw Blade Nut
65-K10	1	Gauge - Cross Cut			
34-K8	1	Plate - Instruction			ASSEMBLIES
2-K9	1	Handle	6Y-K10		Swing Guard Hinge Pin Assembly
8-K9	1	Cover - Gear Housing	12BY-K10		Saw Retaining Washer Assembly
12-K9	1	Stud - Angle Adj.	26-YX		Grease - 8 oz. Tube
20-K9	1	Gauge - Rip			SAW BLADES
40-K9	1	Case - Carrying			
27-K66	1	Switch	18-K10		Rip Blade for 3/4" Jackshaft
21-K75	1	Screw - Depth Adj.	19-K10		Combination Blade for 3/4" Jackshaft
22-K75	1	Knob - Depth Adj. Screw	33-K10		Planer Blade for 3/4" Jackshaft
22-K88	2	Pin - Base Dowel	41-BK10		Blade - 8" Dia. 3/4" Bore Nail
23-K88	1	Insulator - Switch			Resisting and Cross Cut
21-K12	1	Spring - Swing Guard	85-K10		Blade - Inserted Tooth Nail Cutt'g
51-X		Washer - ERA Adapter Nut	1752-X		Tooth No. 5HH8-Style B
193-X	1	Washer - Ground Wire Screw			(For 85-K10)
219-X	3	Screw - Gear Hgs. Cover and Aux. Hdle.	1753-X		Holder - Style B (For 85-K10)
233-XA	4	Screw - Base Ret.	45-YX		Dado Cutter for Std. Jackshaft
238-X		Wrench - ERA Adapter Screw			13/16" Std. Width
293-X	3	Nut - Gib Screw Lock	46-YX		Dado Cutter for Long Jackshaft
306-X	4	Screw - Handle Ret.			1-3/16" Std. Width
385-X	2	Washer - Brush Holder			

§ Not shown in diagram

• Pinion and Jackshaft Gears are Matched and Sold in Sets Only.

Order Parts or Repairs from nearest Porter-Cable Authorized Service Station specifying type of saw shown on name plate. Periodic inspections will prolong the life of your Speedmatic Saw and reduce the cost of maintenance.

TYPE BK-10 SPEEDMATIC SAW



PARTS LIST

SPEEDMATIC SAW

Type BK12

Part No.	Pcs. Reqd.	Part	Part No.	Pcs. Reqd.	Part
1-BK12	1	Frame	633-X	1	Plug - Cord, Three Prong
1-BK12	1	Slide - Depth Adj.	634-X	1	Body - Cord
3-BK12	1	Guard - Front	648-X	1	Wrench - Open End
4-BK12	1	Guard - Swing	675-X	4	Screw - Handle Ret.
5-BK12	1	Screw - Depth Adj.	713-X	1	Handle - Wood
6-BK12	1	Armature - 110 V.	714-X	1	Nut - Wood Handle Stud
6A-BK12	1	Armature - 220 V.	795-X	4	Screw - Gear Housing Cover Ret.
7-BK12	1	Field - 110 V.	818-X	3	Screw - Front Guard Ret.
7A-BK12	1	Field - 220 V.	840-X	4	Screw - Gear Housing Ret.
8-BK12	2	Holder - Brush	846-X	1	Nut - Jackshaft Inner Brg. Ret.
9-BK12	2	Cap - Brush	853-X	1	Pin - Swing Guard Spring Anchor
10-BK12	2	Brush and Spring	862-X	1	Plug - Cord (2 Prong)
16-BK12	1	Plate - Name	863-X	2	Washer - Brush Holder
20-BK12	1	Switch	907-X	1	Stud - Wood Handle Thru
21-BK12	1	Insulator - Switch	922-X	1	Plug - Armature Commutator Brg.
2-K12	1	Housing - Gear	929-X	2	Bolt - Thru Gear Hous'g and Motor
5-K12	1	Segment - Angle Adj.	938-X	2	Screw - Rip Guide Ret.
7-K12	1	Handle - Saw	939-X	1	Pin - Swing Guard Hinge Pin Lock
8-K12	1	Cover - Gear Housing	942-X	1	Reliever - Cord Strain
9-K12	1	Cover - Switch	942-XA	1	Sleeve - Strain Reliever
10A-K12	1	Shaft - Jack	961-X	1	Pin - Depth Adj. Knob Ret.
11-K12	1	Base - Saw	962-X	2	Pin - Base Dowel
12-K12	1	Stud - Angle Adj.	980-X	1	Cord - 3 Wire
14-K12	1	Gib	989-X	4	Screw - Switch Cover
16-K12	1	Knob - Elevating Screw	997-X	2	Screw - Wrench Clip Ret.
17-K12	1	Gauge - Rip	1003-X	1	Clip - Ground Wire (Use 1858-X)
19-K12	1	Clip - Wrench	1155-X	1	Screw - Ground Wire Ret.
21-K12	1	Spring - Swing Guard	1287-X	4	Terminal
24-K12	1	Pinion (See 46-K12)	1526-X	1	Screw - 45° Angle Adj.
28-K12	1	Nut - Angle Adj. Stud	1569-X	4	Screw - Instruction Plate Ret.
29-K12	1	Pad - Gear Housing	1608-X	4	Screw - Gib Adj.
32-K12	1	Washer - Elevating Screw	1858-X	1	Clip - Ground Wire
33-K12	1	Washer - Angle Adj. Segment			
40-K12	1	Case - Carrying			
42-K12	1	Cord (Use 980-X)			
46-K12	1	Gear - Res. Jackshaft with Pinion			
37-K12	2	Washer - Res. Drive	5Y-K12		
48-K12	1	Flange - Outer	12AY-K12		
49A-K12	1	Flange - Inner			
50-K12	1	Shaft - Jack (Special Long for Dado Cutter 1-5/8" Std. Width)	15AY-K12		
64-K12	1	Nut - Saw Retaining	16Y-K12		
70-K12	1	Washer - Inner Gear Flange	5Y-BK12		
45-T4	1	Strap - Wood Handle	26Y-X		
34-K8	1	Plate - Instruction			
30-K10	1	Wrench - Comb. Screw Driver			
193-X	3	Washer - Grand Wire Screw (1), Motor Thru Bolt (2)			
231-X	3	Screw - Wood Handle Strap Ret.	43-K12		
293-X	4	Nut - Gib Adj. Screw Lock	44-K12		
+ 307-X	1	Screw - Ground Wire Ret. (Use 1155-X)	59-K12		
392-X	1	Cup - Gear Housing Grease	45Y-X		
402-X	1	Key - Jackshaft Gear	46Y-X		
420-XA	2	Screw - Brush Holder Ret.	47Y-X		
502-X	1	Bearing - Jackshaft Inner Ball	48Y-X		
513-XA	1	Bearing - Armature Com'tator Ball			
580-XA	1	Bearing - Depth Adj. Screw	85-K10		
587-X	1	Bearing - Armature Gear End Ball	1752-X		
588-X	1	Bearing - Jackshaft Outer Ball	1753-X		
619-X	4	Screw - Base Ret.			

ASSEMBLIES

Swing Guard Hinge Pin Assembly
Res. Gear Jackshaft Assembly with Pinion
Resilient Gear Ass'y with Pinion
Saw Retain Washer Assembly
Armature Assembly 110 V
Grease - 8 oz. Tube

SAW BLADES

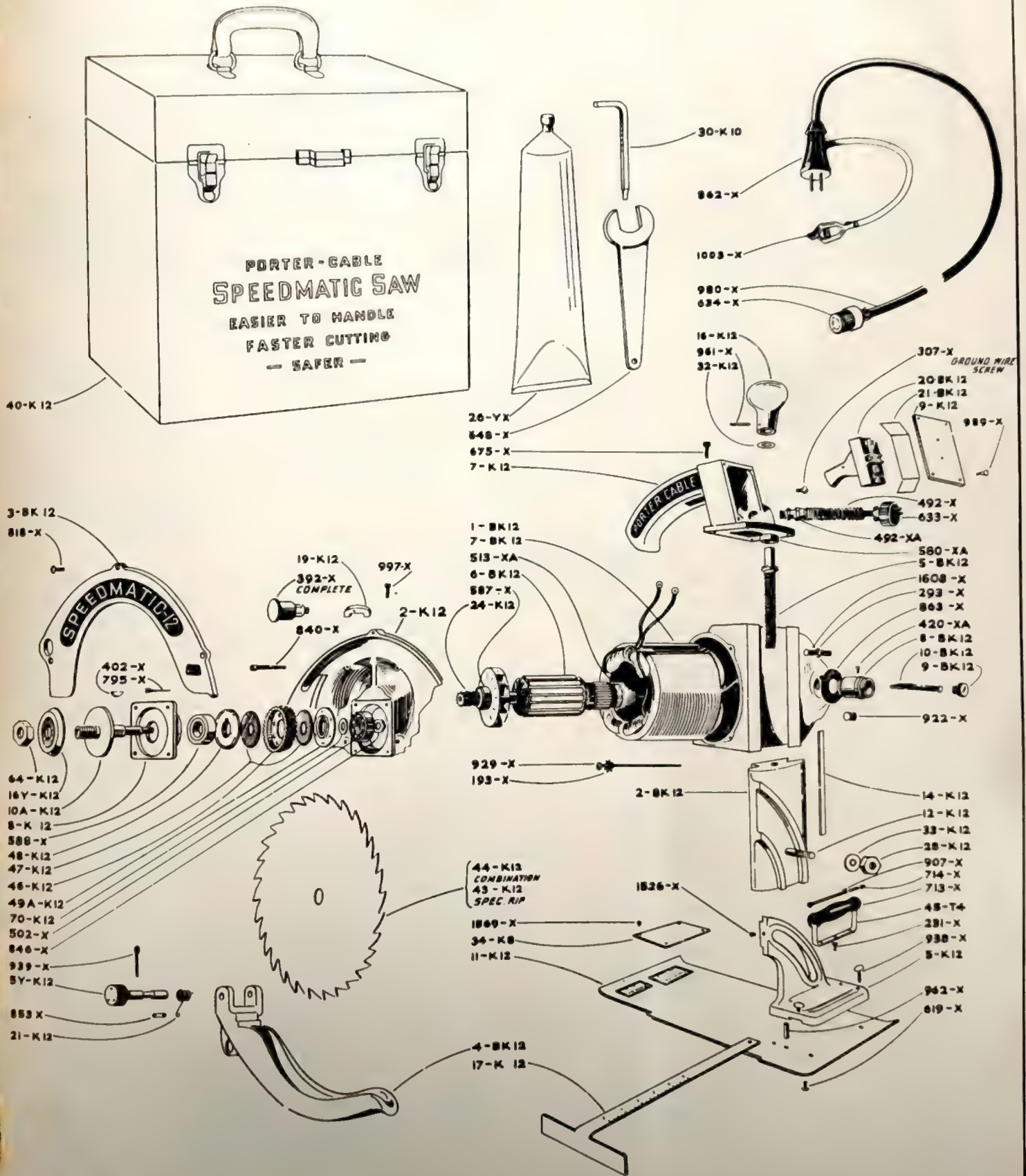
12" Rip Blade
12" Combination Blade
12" Planer Blade
6" Dado Cutter for Std. Jackshaft
13/16" Std. Width
6" Dado Cutter for Long Jackshaft
13/16" Std. Width
6" Dado Cutter for Long Jackshaft
1-5/8" Std. Width
8" Dado Cutter for Std. Jackshaft
13/16" Std. Width
Hi-Speed Inserted Tooth Blade
Bits for Inserted Tooth Bl. 85-K10
Shanks for Inserted Tooth Blade
85-K10

• **Pinion and Jackshaft Gears are Matched and Sold in Sets Only**

† Unable to Furnish

Order Parts or Repairs from nearest Porter-Cable Authorized Service Station specifying type of saw shown on name plate. Periodic inspections will prolong the life of your Speedmatic Saw and reduce the cost of maintenance.

TYPE BK 12 SPEEDMATIC SAW



Look for the service station in your city in the classified section of the telephone directory.



SERVICE STATIONS

ALABAMA
Birmingham 5 - J. A. McGwier, 2807 7th Ave., S.
Mobile - Allen Cook, 802 Holcombe Ave.

ARKANSAS
Little Rock - Wooley Electric Co., 301 E. Markham

CALIFORNIA
Los Angeles 15 - Porter-Cable Machine Co., 1826 So. Hope St.
San Francisco - Porter-Cable Machine Co. Factory Branch, 744 Harrison St.

COLORADO
Denver 4 - Geo. F. Hastings Inc., 1150 Speer Blvd.

CONNECTICUT
New Haven 11 - New Haven Elect. Machine Co., 697 Congress Ave.

DISTRICT OF COLUMBIA
Matson & Coale, Inc., 1021 9th St. N.W.

FLORIDA
Jacksonville - Turner Elect. Wks., 1020 E. 8th St., P.O. Box 4247
Miami - Peninsular Armature Works, Inc., 151 N. West 24th St., P.O. Box 113
Tampa 4 - Patrick Electool Service, 1509 W. Hillsboro

GEORGIA
Atlanta 3 - Porter-Cable Machine Co., Factory Branch, 83 Mills St. N.W.

ILLINOIS
Chicago 10 - Porter-Cable Mach. Co. Factory Branch, 356 W. Huron St.

INDIANA
Indianapolis - H. W. Klingstein, 621 Ft. Wayne

IOWA
Des Moines - Wieland's Service, 909 6th Ave.

KENTUCKY
Louisville 12 - Bailey Machine & Supply Co., 3001 W. Main St.

LOUISIANA
New Orleans - New Orleans Armature Works, 2311 Tchoupitaulas St.

MARYLAND
Baltimore 1 - Matson & Coale, Inc., 511 Park Ave.

MASSACHUSETTS
Boston - W. H. Flaherty Co., 48 Cummington St.

MICHIGAN
Detroit - Porter-Cable Mach. Co. Factory Branch, 17217 Wyoming Ave.

MINNESOTA
Minneapolis 1 - G. C. Peterson Co., 117 Washington Ave., N.

MISSOURI
Kansas City 8 - Kornfeld Thorp Elec. Co., 2700 McGee Trafficway
St. Louis - Standard Tire & Elec. Co., 3880 Washington Blvd.

MONTANA
Livingston - J. Manzari, Box 652

NEW JERSEY
Newark - I. R. Nelson, 7 Bond Street

*Denote Factory & Service Branch

NEW YORK
Binghamton - H. P. Marsh Co., 65 Glenwood at Lake Aves.
Buffalo 14 - Alfred C. Kollmar, 364 Dewey Ave.

*New York 12 - Porter-Cable Mach. Co. Factory Branch, 101 Crosby St.
Schenectady - Barrett Elec. Service, Inc., 108 - 116 Henry St.
Syracuse 8 - Porter-Cable Machine Co., 1714 N. Salina Street
Utica - Reynolds Service, 804-812 Varick St.

NORTH CAROLINA
Shelby - Paul H. Wray, 516 Suttle Street

OHIO
Cincinnati - Matlock Electric Co., 1456 Harrison St.
Cleveland 3 - C. Stewart Co., 4033 St. Clair Ave.
Columbus - B. R. Shoemaker, 1201 Christopher St.

OKLAHOMA
Oklahoma City 6 - R. M. Rice, 1218 N. Western Ave.

OREGON
Portland 9 - Cyrus Electrical Tool Co., 326 N. W. 6th

PENNSYLVANIA
Philadelphia 30 - K. O. Dilmars, 1819 Fairmount Ave.
Pittsburgh - Snyder Electric Co., 1919 Chateau St.

RHODE ISLAND
Providence - H. R. MacBain, 898 Eddy St.

TENNESSEE
Memphis - Tri-State Armature & Elec. Co., 321 E. Butler

TEXAS
Dallas 4 - T. Raymer, 3023 N. Fitzhugh Ave.
Houston 3 - Welders Supply Co., 3301 Polk at Sampson
San Antonio - Electric Motors, Service and Sales, 201 S. Flores St.

UTAH
Salt Lake City - Elec. Motor & Supply Co., 351 W. Fourth Street

VIRGINIA
Richmond 19 - J. P. Long, Jr., 13th at Cary, Shockoe Slip Warehouse

WASHINGTON
Seattle 22 - Stoner & Trace, 1524 12th Ave.
Spokane - K. & N. Electric Motors, Inc., 112 S. Cedar St.

WISCONSIN
Milwaukee - Industrial Electric Motor Service, 1316 N. 12th Lane

CANADA
Calgary, Alta. - Electric Crafts Ltd., 106 6th Ave., W.
Edmonton, Alta. - Bennett & Emmott Ltd., 9639 101A Ave.
Halifax, N.S. - Acme Elec. & Mech. Shop, 93 Bilby St.
London, Ont. - Strongbridge Co. Ltd., Western Rd.
Montreal, Quebec - Perce Ltd., 835 Duluth St., East
St. John, N.B. - E. S. Stephenson & Co.
Toronto, Ont. - Electric Repair & Motor Co., 81 St. Patrick St.
Vancouver, B.C. - Armature Electric Service, 1055 Seymour
Winnipeg, Man. - Luke's Electric Motor & Mech. Co., 324 Notre Dame St.

Other SPEEDMATIC TOOLS you should know about...

SPEEDMATIC SAW TABLE



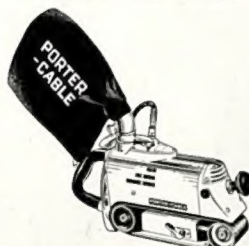
For use with models 507, 508, K-75, K-89, K-88C Speedmatic Saws. Table size: 26" deep x 20" wide. Overall width: 45". Table top precision ground to insure accurate work.

3" BELT SANDER



Model A-3. Belt size: 3" x 24". Belt speed: 1600 SFPM. Size overall: 5 1/8" x 16" x 7 3/4". Net weight: 14 lbs.

DUSTLESS 3" BELT SANDER



Model BB-10. Belt size: 3" x 27". Belt speed: 1475 SFPM. Size overall: 5" x 18" x 9 1/4". Net weight: 23 lbs.

DUSTLESS 4" BELT SANDER



Model 500. Belt size: 4" x 27". Belt speed: 1140 SFPM. Size overall: 5 5/8" x 18 1/8" x 8 3/8". Net weight: 25 lbs.

FINISHING SANDER



Model 1000. Orbital motion gives velvet-smooth surface. Non-stalling motor. Pad speed: 5000 RPM (3/16" dia. orbit). Pad size: 3 1/2" x 9" (takes 1/3 of standard abrasive sheet). Size overall: 7 1/4" x 8" x 4 3/4". Net weight: 8 lbs.

BUILDER'S ROUTER



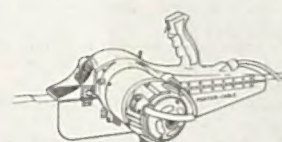
Model UB. Powerful, universal motor interchangeable with plane, shaper, or lock mortiser. Speed 18,000 RPM. Chuck 3/16" capacity—adapters to 1/16". Overall size: 9 1/4" x 8" x 6". Net weight: 8 1/2 lbs. Micrometer depth adjustment.

BUILDER'S SHAPER



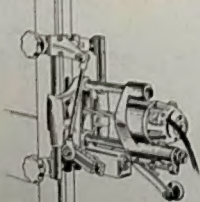
Uses inverted router. Model UBS. Table size: 12" x 20". Jointer fence sections slide back and apart, maintaining their vertical position. Model UBS-Y4 for bench mounting. Model UBS complete with pedestal.

ELECTRIC PLANE



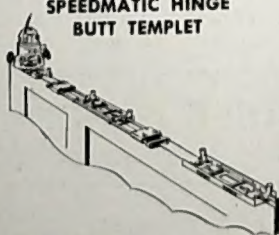
Model UP. Uses interchangeable motor. Width of cut: 2 7/16". Depth of cut: 3/32" (adjustable while plane is in use). Net weight: 21 lbs. Reversible and renewable double-edged steel blades.

LOCK MORTISER



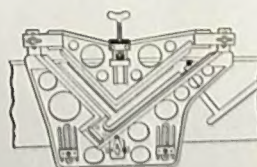
Model ULM. Uses interchangeable motor. Absolutely accurate. No shims required. Length and depth of cut adjustable. Overall size: 16 1/2" x 16 3/4" x 12 1/4". Net weight: 26 lbs.

SPEEDMATIC HINGE BUTT TEMPLET



Adjustable to any door or jam up to 8 ft. high. Comes in 3 sections; middle section automatically self-centering. No slipping. Each gauge is locked in place when set.

STAIR TEMPLET




Model UST. For cutting stair stringers. Only two major parts—top and bottom halves. Completely adjustable, held securely by 2 bolts. Size overall: 26" x 20" x 1". Net weight: 50 lbs.

AIR DRIVEN SANDER



Model 1512. Operates efficiently at 60 lbs. air pressure, 6 1/2-7 1/2 cu. ft. of air per minute. Reciprocating motion, 3000 (5/8") strokes per minute. Pad size: 3 3/4" x 7 1/8". Size overall: 5" x 8 1/2" x 4 1/2". Net weight: 12 lbs.

No postage required if mailed in U. S.
or its territories. If mailed from Canada
or elsewhere outside U. S. Territory,
affix postage stamp. 

FIRST CLASS
Permit No. 9
(Sec. 34.9, P. L. & R.)
SYRACUSE, N. Y.

BUSINESS REPLY CARD

NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

3¢—POSTAGE WILL BE PAID BY
PORTER-CABLE MACHINE COMPANY

1712 NORTH SALINA STREET

SYRACUSE 8, N. Y.



YOUR

GUARANTEE

**IS NOT COMPLETE UNTIL
THIS CARD IS RETURNED**

Your Name _____

Street _____

City _____ State _____

Type of Business _____ Type of Machine _____

Model _____ Series _____

Date Purchased _____

Name of Store _____

City _____ State _____

Do you own any other Porter-Cable equipment? _____

What first led you to consider this machine? Please check ONE.

_____ Magazine ad. (Please name magazine, if you recall) _____

_____ Ad in newspaper, circular, catalog — or exhibit. _____ Friend recommended — or used someone else's.

_____ Saw in store — or recommended by salesman. _____ Owned other Porter-Cable which I liked.

What do you plan to use this machine for primarily? _____

Other comments _____

PORTER CABLE
Speedmatic
TOOLS



PORTER-CABLE PORTABLE ELECTRIC TOOLS

- PORTABLE SAWS
- ELECTRIC SANDERS
- COMBO-TOOLS
- ELECTRIC HEDGSHEARS
- ROUTERS
- SHAPERS
- ELECTRIC PLANES
- MORTISERS

PORTER-CABLE MACHINE CO.

Serving America's Master Craftsmen Since 1906